Title: Examining factors influencing the repurchasing intention of credence products: empirical evidence from Thailand

Name: Sunyansanoa, Sophapan

EXAMINING FACTORS INFLUENCING THE REPURCHASING INTENTION OF CREDENCE PRODUCTS: EMPIRICAL EVIDENCE FROM THAILAND

SOPHAPAN SUNYANSANOA

PhD

2013

UNIVERSITY OF BEDFORDSHIRE

EXAMINING FACTORS INFLUENCING THE REPURCHASING INTENTION OF CREDENCE PRODUCTS: EMPIRICAL EVIDENCE FROM THAILAND

by

SOPHAPAN SUNYANSANOA

A thesis submitted to the University of Bedfordshire in partial fulfilment of the requirements for the degree of Doctor of Philosophy

July 2013

EXAMINING FACTORS INFLUENCING THE REPURCHASING INTENTION OF CREDENCE PRODUCTS: EMPIRICAL EVIDENCE FROM THAILAND

SOPHAPAN SUNYANSANOA

ABSTRACT

The purpose of this study is to examine post-purchase evaluation factors influencing repurchase intention of credence products, and develop a model of consumer's post-purchase evaluation for the repurchase intentions. The credence products in this case are dietary supplements, with a focus on consumers in Thailand.

The study classifies a conceptual model and hypothesised relationships into two consumer perspectives: product; and brand. This research assumes that trust, expectations, satisfaction factors may relate to repurchase intention for the consumer product perspective. Also, brand trust, brand experience, expectation, and satisfaction factors are correlated with repurchase intention from the consumer brand perspective.

The research adopts a hypothetico-deductive method to enable the testing of hypotheses and also a structural equation modelling (SEM) to measure the constructive relationship and regression analysis that evaluates the relationship between independent and dependent variables. Both simple regression and hierarchical multiple regression analysis were used to examine the effect of post-purchase evaluation factors on repurchase intention. These analyses are based on

a sample of 504 dietary supplement users of vitamins, minerals, and herbs or other botanical products in four regions of Thailand through face-to-face structured interviews.

Findings indicate that from consumers' product perspective, consumer trust has no significant direct effect on consumer repurchase intentions whereas the relationship between consumer trust and consumer repurchase intentions of credence products are related, when it is mediated by consumer expectation and consumer satisfaction. In terms of consumers' brand perspective, the study leads to a better understanding of consumer brand trust and consumer expectation, both of which have no significant direct effect on consumer repurchase intentions. Consumer brand trust, consumer brand experience and consumer repurchase intentions are not correlated when mediated by consumer expectation. Other findings reveal that brand experience has a direct impact on repurchase intentions whereas consumer satisfaction is a significant mediating factor when connected with: (1) the relationship between consumer brand trust and repurchase intention; (2) the relationship between consumer brand experience and repurchase intention.

The study makes a contribution to a post-purchase evaluation for repurchase intentions of credence products from both consumers' product and brand perspectives in Thailand. This study also suggests that consumer brand experience is the strongest factor and consumer satisfaction is the strongest mediator for consumers' P-PE for the repurchase intention of credence products. From a managerial perspective, the findings of this study provide evidence for both the public and private sector in Thailand in terms of devising marketing strategies in accordance with this model.

DECLARATION

I declare that this thesis is my own unaided work. It is being submitted for the degree of Doctor of Philosophy at the University of Bedfordshire.

It has not been submitted before any degree or examination in any other university.

Name of candidate: Sophapan Sunyansanoa Signature:

Date:

LIST OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

ACKNOWLEDGEMENT

First of all, I would like to thank my family for their love and support, which encouraged me throughout my PhD studies in the UK.

I wish to express my deep gratitude to Dr. Jillian Farquhar, Professor and Director of Studies, who gave guidance and directions throughout the thesis production. With her well-rounded research experience, she provided me with valuable reviews and comments, which greatly improved my work.

I would also like to offer my special thanks to Dr.Barbara Czarnecka, my second internal supervisor, for her academic support and useful suggestions, which very much assisting me in completing the thesis.

I also extend my appreciation to the Royal Thai Government, who sponsored my PhD studies. Further, I extend special thanks to the Ministry of Science and Technology of Thailand; and the Thailand Institute of Scientific and Technological Research (TISTR), which I have worked for.

Finally, I would like to thank all of my friends and colleagues for their kind support and encouragement. Last but not least, I would like to thank my team and the survey respondents. Many thanks also go to the Research Graduate School staff, who offered me all the study facilities during my years at the University of Bedfordshire.

Chapter 1

Introduction

1.1 Introduction

This chapter presents the research background and context, aims, objectives, and research questions, including an outline of the thesis structure. Section 1.2 discusses the research background and context. Research aims, objectives, and questions are shown in section 1.3. Section 1.4 addresses conceptual frameworks of this study. Section 1.5 explains an overview of the results. Section 1.6 presents a summary of the thesis structure.

1.2 Research background and context

Evidence suggests that, after purchasing credence products, a larger number of factors affect consumer repurchase, in comparison with non-credence products. The credence attributes of products can impact on consumer decision-making (Anderson and Philipsen, 1998). Research in marketing, especially focusing on credence products' relevance to post-purchase evaluation, and repurchase intentions with respect to dietary supplements, seems insufficient. As for post-

purchase evaluations, knowledge of factors relating to post-purchase evaluation that may affect the repurchase intentions of dietary supplements is still limited. Consequently, this study sought to address these major gaps by developing a theory-based model of post-purchase evaluation for repurchase intentions and to fill the literature gaps in post-purchase evaluation in respect of credence products, with a focus on dietary supplements in the Thai context.

A post-purchase evaluation is a major component of all consumer decision-making models. Consumer evaluation of potential alternatives consists of selecting and evaluating each brand. Planning the selection is a list of products or brands that consumers have in mind, become familiar with, remember, and accept (Schiffman *et al.*, 2008). Oliver (1980) stated that future intention has a significant impact both directly and indirectly on customer attitude and is also related to customer satisfaction. Wilkie (1994) advocated that satisfaction is a major reason for future purchase behaviour. Therefore, a number of post-purchase evaluation factors are important for consumers when they decide to repurchase products. Consumer feelings after purchasing also indicate consumer repurchase behaviour (Engle *et al*., 1978). In order to understand the consumer's post-purchase evaluation for repurchase intentions of credence products, it is critical to examine a number of factors. In addition, whether the pattern of Thai consumer's behaviour toward credence products is similar to or different from those in other countries is an issue that has yet to be explored with empirical research.

Information on the models of Thai consumer's post-purchase evaluation on a repeat purchase of credence products is still limited. In present-day Thailand, consumers focus on preventive health measures, rather than going to the hospital after becoming sick (Kasikorn Research Company Limited, 2007). A judgement on dietary supplements makes dietary supplements a credence product and it is uncertain whether consumers accept it for a long time. Consequently, there are many other reasons why consumers decide to consume dietary supplements such as preventive health measures, age-associated problems, or recommendations by health professionals and so on (Mason, 2001).

As a result, the study begins with investigating factors that may influence users' post-purchase evaluation with respect to repurchase; then, whether or not these factors can explain why consumers repurchase dietary supplements (for quality or brand reasons or both) and how they evaluate dietary supplements as credence products. The post-purchase evaluation (P-PE) factors reviewed in this study are classified into two consumer perspectives: product and brand. Consumers' product perspective consists of the degree of consumer trust in the products, expectation, satisfaction, and repurchase intention. Consumers' brand perspective comprises the degree of brand trust, brand experience, expectation, satisfaction, and repurchase intention. The researcher then compares the influence of post-purchase factors on product and brand previously mentioned in the literature. Therefore, the purpose of this study is to develop a model of P-PE for the repurchase of credence products, specifically dietary supplements in Thailand.

1.3 Research aims, objectives, and questions

Having set the background and context of study in the previous section, the study classifies the research aims, objectives and questions as follows.

1.3.1 Research aims

This research examines consumer's post-purchase evaluation models for repurchase intentions of credence products in Thailand, specifically focusing on dietary supplements.

1.3.2 Research objectives

The purpose of the current study is to develop a model of P-PE for the repurchase intentions of credence products, specifically dietary supplements in Thailand, with three research objectives to achieve.

Research objective 1: To identify the factors influencing consumer's post-purchase evaluation for repurchase intentions of credence products.

Research objective 2: To measure the relationship between the post-purchase evaluation factors and repurchase intentions of credence products in Thailand by means of a survey.

Research objective 3: To develop a conceptual model linking consumer's post-purchase evaluation to repurchase intentions for credence products in Thailand.

1.3.3 Research questions

In order to fill the gaps in the literature, this research sought to answer the following questions:

Research question 1: What are the factors influencing consumer's post-purchase evaluation of credence products?

Research question 2: How does a conceptual model link consumer's post-purchase evaluation for repurchase intentions to credence products?

Research question 3: What is the importance of the post-purchase evaluation factors for repurchase intentions of credence products in Thailand?

Research question 4: What is a consumer's post-purchase evaluation model for repurchase intentions of credence product in Thailand?

1.4 Conceptual framework of this study

Figure 1.1 presents an overview of the conceptual framework used in this study. This research assumes that the factors of post-purchase evaluation affect consumers' purchasing decisions. In turn, the study expects this to influence

repurchase intentions. An investigation of the post-purchase evaluation relationship with repurchase intentions of the credence product model is divided into two consumer perspectives.

(1) Consumers' product perspective focuses on trust, expectation, satisfaction, and repurchase intention.
(2) Consumers' brand perspective focuses on brand trust, brand experience, expectation, satisfaction, and repurchase intention.

The factors of post-purchase evaluation identified in the literature are employed as independent variables consisting of trust, expectation, satisfaction, brand trust and brand experience. The dependent variables of this study concentrate on repurchase intentions for both the consumers' product perspective and consumers' brand perspective, and consequently develop a post-purchase evaluation model for repurchase intentions of credence products.

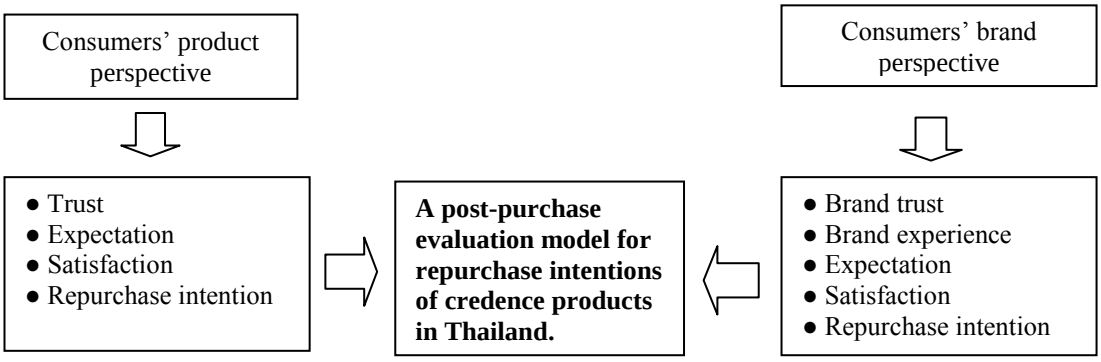


Figure 1.1 Conceptual framework of this study

1.5 Overview of the results

This study was conducted in four regions of Thailand: north, north-east, central including Bangkok, and the south of Thailand, with 504 respondents. The research has defined P-PE factors through an extensive literature review and has generated twenty-one hypotheses in total. The research method was a survey. All variables from both consumers' product and consumers' brand perspectives were reliable at Cronbach's alpha values of 0.9. Kurtosis and skewness also indicated that the data were normally distributed. Moreover, the Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy.

The current findings suggest that six hypotheses support the consumers' product perspective. Only one hypothesis is not accepted: consumer trust has no relation to repurchase intentions of credence products with respect to dietary supplements (vitamins, minerals, herbs or other botanicals) in Thailand. Likewise, another ten hypotheses from the consumer brand perspective are supported. Only four hypotheses are rejected. The full P-PE model for repurchase intentions of credence products and hypothesis relationship is identified by the standardized coefficient values from structural equation modeling results in Figure 7.1.

1.6 Structure of the thesis

The thesis is broken down into eight chapters as presented in Figure 1.2, and the remaining seven chapters are summarised in the following section.

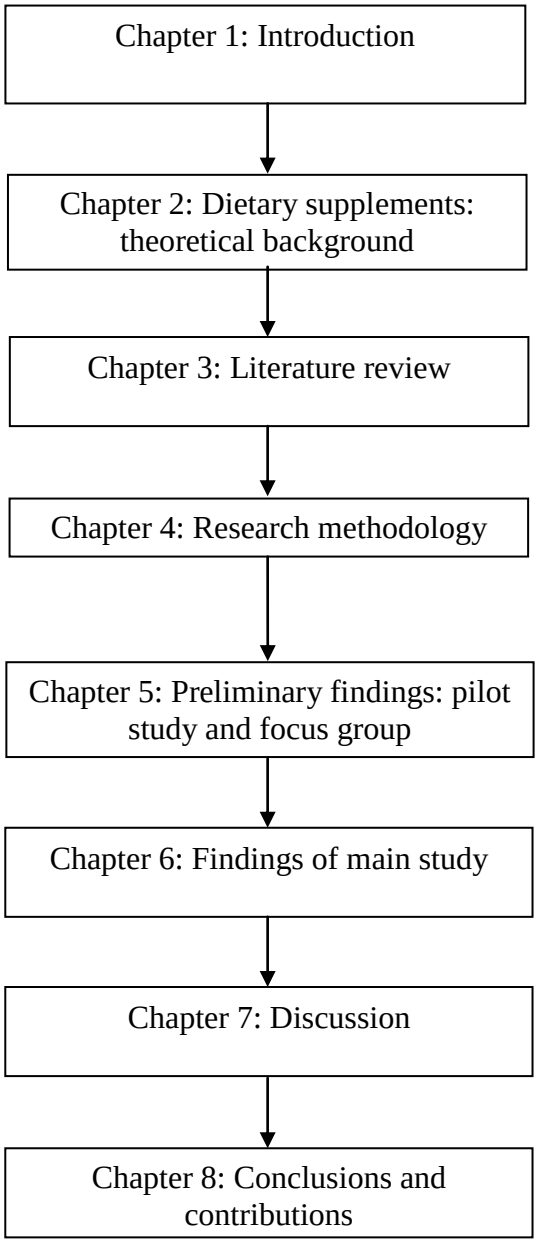


Figure 1.2 Thesis structure

Chapter 2 Dietary supplements: theoretical background

This chapter presents the definitions of credence products and dietary supplements, as well as introducing the notification of food supplements in Thailand, market situations and total sales of dietary supplements in Thailand. The research further explains Thai dietary supplement customers in relation to characteristics of dietary supplements as credence products. An overview of market directions, dietary supplement customers and trends of the dietary supplement market in Thailand are also provided.

Chapter 3 Literature review

This chapter presents a literature review on consumer decision-making processes and relevant theories, with an emphasis on consumer's P-PE. In particular, it highlights the significance of an understanding of repurchase intentions and P-PE factors. The literature addresses the theoretical development of consumer decision-making processes with a focus on a conceptual model linking P-PE for repurchase intentions to credence products in Thailand, in relation to the challenges of dietary supplements. Theoretical frameworks and hypotheses of this study are based on models of P-PE from ample research, for example by, Oliver (1981), Richins (1983), Westbrook and Oliver (1991), Day (1977), Doney and Cannon (1997), Sheth *et al.* (1999), Singh and Sirdeshmukh (2000), Delgado-Ballester *et al.* (2003), Yi and La (2004), Brakus *et al*. (2009), Yi and Gong (2009), Lymperopoulos *et al.*(2010), and Ha *et al*. (2010). The hypotheses of this

research are developed from a review of the literature and the results of two focus group sessions conducted in Thailand on August 23rd and 28th, 2011. Credence product theories are reviewed in relation to this study, and gaps in the research subsequently identified. Finally, an overview of relationships between the hypotheses and a summary of the hypotheses is presented.

Chapter 4 Research methodology

This chapter classifies research methodology and philosophy. It begins with a discussion of the research philosophy which emphasises epistemological issues. The hypothetico-deductive method was chosen for collecting data and developing hypotheses as it allows the researcher to seek data to confirm or challenge all or part of a hypothesis test, a model, and also which may extend to further research. Furthermore, this chapter discusses the research approaches and strategies. The research design explains the sampling process and data collection, specifically, the process of questionnaire development, which is the main instrument of the study.

The study analysed data with SPSS and AMOS version 19.0. Descriptive statistics report the frequency and mean values, and exploratory factor analysis (EFA) explains the validity test. Research reliability is based on Cronbach's alpha coefficient. Confirmatory factor analysis (CFA) tests the constructs of measurement. The study used structural equation modelling (SEM) to measure the construct relationship and continued to evaluate the measurement model by path

analysis. Finally, regression analysis evaluates the model relationship between independent and dependent variables as explained in Chapter 6.

Chapter 5 Preliminary findings: focus group and pilot study

This chapter presents the focus group sessions and the pilot study. The focus group was intended to find more information in order to develop a questionnaire, theoretical frameworks, identify variables of post-purchase evaluation factors that may impact on repurchase intentions, and refine the model and hypotheses. The pilot study was used to assess research reliability and validity and to develop a questionnaire prior to the official survey.

Chapter 6 Findings of main study

This chapter reports the main findings of the study. It begins with data screening, an examination of response rates, and the demographic characteristics of the respondents. Descriptive statistics explain the frequency of distribution and the central tendency, while exploratory factor analysis (EFA) is utilized to test the validity constructs. The study classifies the model into two consumer perspectives: product and brand. Confirmatory factor analysis (CFA) tests all measurement variables for the overall model fit, and then re-evaluates and modifies the model. Next, structure equation modelling (SEM) tested the hypothesized direct and indirect relationships and indicated which hypotheses were supported and which were rejected. Regression analysis analysed the

relationship between each independent variable (individual items) and dependent variables. This also examined the hypotheses that supported and rejected of the model. Finally, the study evaluates and compares the hypotheses between consumers' product perspective and consumers' brand perspective models and then develops conceptual models for this study.

Chapter 7 Discussion

Chapter 7 discusses the research results. This chapter examines the difference in results between consumers' product perspective and consumers' brand perspective for P-PE models for repeat purchase of credence product and also discusses the hypotheses which are supported and rejected. Finally, the results show the contributions to knowledge to the theory of P-PE models for repeat purchase of credence products with respect to dietary supplements in Thailand.

Chapter 8 Conclusions and contributions

This chapter summarises the conclusions and contributions to knowledge, including suggestions of research limitations and the direction of future research. The research thus attempts to respond to the research objectives and questions. Importantly, it intends to provide P-PE models for repurchase intentions of credence products in respect of dietary supplements in Thailand. The research contribution is expected to enrich the existing literature on consumer's post-purchase evaluation for repurchase intentions. Managerial implications are

beneficial for relevant private sectors of credence products and Thai public institutions such as Government Pharmaceutical Organization (GPO), and the Thailand Institute of Scientific and Technological Research (TISTR).

Furthermore, key findings sorted the research's limitations into two categories: conceptual limitations and methodological limitations, while suggesting three possible directions for future research, in general, (a) the generalisability to other credence products or credence services, (b) analysing other factors or other perspectives, (c) conducting qualitative methods.

The next section reviews the theoretical background of dietary supplements, and intends to explain the definitions, market situations and behaviour of consumers of dietary supplements in Thailand.

Chapter 2

Dietary supplements: theoretical background

2.1 Introduction

This chapter presents fundamental theories related to dietary supplements, the market situation of dietary supplements in Thailand, and Thai dietary supplement customers. The review begins with a theoretical background of dietary supplements and explains the characteristics of dietary supplements as credence products in section 2.2. In section 2.3, dietary supplements in the Thai market context is addressed in order to provide an overview dietary supplements market directions and trends. Section 2.4 presents the understanding of Thai dietary supplement customers. Finally, the chapter concludes with a summary in section 2.5.

2.2 A theoretical background of dietary supplements as credence products

In this study, dietary supplements are discussed specifically as these products address the characteristics of credence products. Therefore, the definitions of credence products and dietary supplements and characteristics of dietary supplements that are relevant to credence products are explained in the next section.

2.2.1 Definitions of credence products

Darby and Karni (1973, pp. 68-69) are the very first authors to provide a definition of credence products based on the economic literature as follows:

> credence qualities are product qualities that cannot be evaluated by search prior to purchase or experience after purchase, and are very costly to evaluate at all.

It is hard to evaluate a credence product, even after consumers have consumed or purchased it (Nelson, 1974; Ford *et al*., 1988; Hahn, 2004). This is consistent with Arora (2006, p. 286) who suggested that "credence attributes are those characteristics or qualities of the product or service that cannot be judged even with product use (competence of a physician)". The quality of the product's production and not the "intrinsic characteristics of the product itself" is important

for credence product attributes (Mondelaers *et al*., 2009, p. 1121). Credence products are those that mainly rely on trustworthy information (Darby and Kami, 1973). Emons (1997, p. 107) stated that in terms of credence goods, "consumers are never sure about the extent of the good they actually need". This is similar to Dulleck and Kerschbamer (2006, p. 7) who introduced the idea that "the key feature of credence goods is that consumers do not know which quality of a good or service they need". Under these conditions, the low quality products do not correspond to consumers' requirements, and the high quality products do not "add extra value" (Dulleck and Kerschbamer, 2006, p. 7). This is confirmed by Smith and Royne (2010) who stated that consumers cannot verify the product quality unless they purchase the same product again. Ford *et al.* (1988, 1990) and Grolleau (2002) suggested that experts have more "technical expertise" (Ford *et al.*, 1988, p. 241) and thus can evaluate such credence claims better than consumers. Moreover, credence attributes which are certified by a third party or trustworthy organisation can build trust among consumers (Caswell and Mojduszka 1996). For example, some products may have vitamins but consumers cannot assess the credence attributes even after they have tried the product (Darby and Karni, 1973).

Therefore, this study is attempting to examine dietary supplements as credence products, which depends on the degree of post-purchase evaluation for repurchase intentions of Thai users of dietary supplements.

Definitions of dietary supplements are offered in the next section.

2.2.2 Definitions of dietary supplements

The US Food and Drug Administration (USFDA) under the Dietary Supplement Health and Education Act (DSHEA, 1994) has classified dietary supplements as:

> a product taken by mouth that contains a "dietary ingredient" intended to supplement the diet. The "dietary ingredients" in these products may include: vitamins, minerals, herbs or other botanicals, amino acids, and substances such as enzymes, organ tissues, glandulars, and metabolites (US Food and Drug Administration, 2012, p. 4).

Further, the health claim of dietary supplements, as certified by scientific agreement, is the only acceptable claim. USFDA mentioned that a certificate issued by a third party is also approved. This differs from drugs because consumers consume drugs when they have an illness or receive a prescription from a doctor. By contrast, in the consumers' view, dietary supplements are similar to traditional commodities they consume in daily life (Nagler *et al*., 2009). In the UK, the World Cancer Research Fund (2010, p. 3) defined dietary supplements as follows:

> dietary supplements contain vitamins, minerals, herbs or plant materials. They can be found in pill, capsule, tablet or liquid form and are used to supplement (add to) the diet, but they should not be considered a substitute for food.

In Thailand, the Thai Food and Drug Administration of the Ministry of Public Health (2010, p. 376) defined food supplements as follows:

> food supplement means consuming products, other than conventional foods, which contain nutrients or other substances as ingredients in forms of tablets, capsules, powders, flakes, liquid or others, each of which are not conventional foods and made for consumers who expect health promotion.

In addition, a recent report on the Profile of Definition, Terminology, and Technical Requirement of Traditional Medicines and Health Supplements among ASEAN Member Countries, classified the nutrients or other ingredients of dietary supplements into the following five categories (still based on the Thai definition) (The Association of Southeast Asian Nations, 2006, p. 9):

> (1) Vitamins, amino acids, fatty acids, minerals, and products derived from plants or animals.
> (2) Concentrates, metabolites, constituents, or extracts of any ingredients in (1).
> (3) Synthetic sub stanches replicating any substances as in (1) or (2).
> (4) Any combinations of substances in (1) (2) or (3).
> (5) Any other ingredients on the list prescribed by Thai Food and Drug Administration and approved by the Food Committee.

Dietary supplement users know that they can gain some particular nutrients from food, natural fruits, and vegetables. However, some evidence shows that some

users who lack particular nutrients from normal food hardly consume supplements. Moreover, some users are willing to take appropriate supplements, even though they obtain sufficient nutrients from their normal food intake (Horwath and Worsley, 1989). The main types of dietary supplements are comprised of botanicals (derived from herbs and other plants), vitamins, minerals and fatty acids. Forms of dietary supplements include tablets, capsules, powders, soft gels, gel-caps and liquids (Shane-McWhorter, 2009). Moreover, dietary supplements also include drinks and supplement bars which can be purchased at supermarkets, pharmacy shops, health product shops and on the internet. Further, dietary supplements are classified as food with no harm to consumers' health (National Health Service, 2011). Distribution of food supplements in Thailand must be done as stipulated by the Food Act B.E. 2522 (1979) as summarised in Table 2.1.

Table 2.1 Summary of food supplement products notification in Thailand

No.	The Food Act B.E. 2522 (1979)
1	Quality, standard and labels must be approved before applying for food registration for food supplements that are manufactured for distribution or for food supplement products with main ingredients as listed by Food Control Division, Food and Drug Administration.
2	Food Supplements must comply with the quality or standard as stipulated by Food Control Division, Food and Drug Administration.
3	The use of food additives, manufacturing process, containers, and the presentation of food supplements which are intended for consumers must comply with the notifications of Ministry of Public Health.
4	Labels of food supplements which are intended for consumers must be presented in Thai language and can be also in foreign language.
5	Health claims on the labels must comply with the notifications of Ministry of Public Health regarding health claim and consumption warning.
6	Labels of food supplements which are not intended for consumers must be presented in Thai language, except those for exported food supplements which can be also in English language.

Adapted from Food Act B.E.2522 including Ministerial Regulation and the Notification of Ministry of Public Health of Thailand (revised version as of B.E.2553), the Notification of Ministry of Public Health of Thailand No.293 (2005) regarding food supplement products (Notified on 15th December 2005).

2.2.3 Characteristics of dietary supplements as credence products

This section presents a discussion of dietary supplements as a credence product. In general, consumers perceive that dietary supplements are significant for health. It is still problematic, though, how they evaluate the products and how they select suitable products for their health or physical condition. In response to these problems, product characteristics can provide some information for consumer.

Table 2.2 classifies three types of product characteristics. For search characteristics, simple inspection is the best quality because consumers have low pre-costs to detect product quality and tend to repurchase, even they do not have post-costs to confirm the observed quality. In terms of experience characteristics, consumers have high pre-costs but low post-costs. In this situation, consumers gain more data from purchasing, and continuing to consider whether or not to repeat a product purchase. Lastly, credence characteristics are the guarantee of a product by a third party which can lead to consumers' reliance on the product. The high cost is one of the credence characteristics with an important role in the consumers' detection of the quality of product and repurchase (Krouse, 1990).

Table 2.2 Types of product characteristics

Characteristic	Pre-cost	Post-cost	Purchase behaviour affected
Search goods	Low	No cost	First time and repeated purchase
Experience goods	High	Low	Repeated purchase
Credence goods	High	High	First time and repeated purchase

Adapted from Ford *et al.* (1988) and Andersen and Philipsen (1998)

Moreover, characteristics of credence products affect consumers' decision-making in buying credence products. The credence characteristics consist of three types: hidden qualities such as production processes; minimum standards; and brand (Andersen and Philipsen, 1998). Credence characteristics in the dietary supplement context are based on judgements relating to food because the characteristics of products need to be judged by consumption. Therefore, credence based on the dietary supplements is particularly necessary. This is consistent with the DSHEA Act 1994 which specifies that these products are categorised as foods, rather than drugs. Dietary supplements differ from foods as most products are packed into tablets, gel caps, and capsules and each type contains nutritious ingredients as foods. Therefore, a judgement on dietary supplements makes for a credence product and it is uncertain whether or not consumers accept it for a long time. This decision is based on the values of product, expert confirmation, or a trustworthy testimonial from professions (Nagler *et al*., 2011). Consumers probably evaluate their judgements by consumption experience (Hahn, 2004).

In other words, the justification of dietary supplements as credence product characteristics in the Thai context of this study is based on Darby and Kami (1973), Andersen and Philipsen (1998), Krouse (1990) and Hahn (2004).

2.3 Dietary supplements in the Thai market context

In recent years, there has been ample evidence that food consumption patterns play a vital role in health as to whether people consume sufficient nutrition

through their food, or whether supplement consumption is necessary for good health. In the opinion of nutritionists, additional nutrients and micronutrients are important to some people, for example, those who have insufficient food intake or those who want to increase their health performance at a particular time (Godfrey and Richardson, 2002). A dietary supplement has become an alternative for people with health concerns. At present, many people consume dietary supplements because they believe these products will make them healthier, as compared to the food consumption alone. However, it is probable that people doubt the benefits of consuming these dietary supplements. Even after consumers have already tried the products, some may doubt whether the products are truly safe and beneficial (Hahn, 2004). As the National Health Service (NHS) (2011, p.1), in the UK, mentioned "supplements are clearly popular, but it's hard to know what to believe".

In Thailand, there are several factors involved in the health market. Consumer behaviour often changes and consumer trends have now shifted to preventive health measures. Both consumers and market trends have focused on health and fitness, which also addresses nutrition. The current cost of health care is likely to increase, to a much larger sum than has previously been the case. Consumers tend to be aware of the environment, so plant-based products are launched in response to this trend. Finally, there is a rising trend of global acceptance that food is of therapeutic value (Kasikorn Research Company Limited, 2004). This is consistent with Verdes (2009), who advocated that consumers place emphasis on preventive health and intend to reduce the expenses of health interventions by focusing on

disease prevention. This is also in line with Godfrey and Richardson's (2002, p. 913) statement that "Health is much more than the absence of disease. It is a continuing positive state of physical, emotional, and social well-being".

Although health products seem to be a promising business today, there are still other determinants marketers should keep in mind, for example, new media occur every day and people are likely to earn higher incomes than previously. Marketers thus are likely to look for strategies to push consumers to spend money on products or services while creating niche products for niche markets and any product that responds to the consumers' emotions. As a result, before launching a new product, businesses need to focus not only on product quality but also on customers' feelings (The trends of online media, 2009). Moreover, promotional tools are also important for marketers to induce consumers to spend money on products or services (Evans *et al*., 1996).

In Thailand, the dietary supplement market has shown a tendency to rapidly increase. A number of reports also show that the overall health market has grown. In 2010, sales of health products in Thailand were expected to increase in this highly competitive market (The trends of health concern, 2009). Kasikorn Research Company Limited (2007) predicted that the market would expand in the next three to five years as Thai consumers turn their attention to health and spend a lot more on health products than previously, particularly dietary supplements. This is in accordance with what Verdes (2009, p. 27) suggests: "The stars appear to be aligning for the dietary supplement industry these days", and also confirmed

by Meadows (2004, p. 10) that the dietary supplement industry has changed tremendously over the past decade. Furthermore, a consumer survey conducted by Nielsen Company Limited (2009) revealed that Thailand and the Philippines were among the world's highest ranked countries in consuming dietary supplements. This is consistent with information reported by Kasikorn Research Company Limited (2007), Siamturakij (2011) and Thaipost (2012), which noted that total sales of products from 2007-2011 have rapidly increased. Table 2.3 indicates that in 2009 the market growth rate in dietary supplements increased dramatically from 7.1% to 26.6%. Moreover, in 2010, the total sales of dietary supplements in Thailand reached £532 million and grew over 10% (Thansetakit, 2011). In 2011, total sales of dietary supplements were 29,000 million baht (£580 million) and are anticipated to reach more than 38,000 million baht (£760 million) by 2015 (Thaipost, 2012).

Table 2.3 Market growth rate of dietary supplements in Thailand from 2007-2011

Years	**Total market sale (Million baht)**	**Total market sale (Million £)**	**Market growth rate (%)**
2007	16,800	336	-
2008	18,000	360	7.1
2009	22,800	456	26.6
2010	26,600	532	16.6
2011	29,000	580	9.0

Adapted from Kasikorn Research Company Limited (2007), Siamturakij (2011), Thaipost (2012). Exchange rate as on October 28th, 2012.

Under these circumstances, the overall share of dietary supplements in the market is likely to rise. Moreover, consumers also tend to consume dietary supplements produced in the original countries of the products as this can guarantee product quality (Kasikorn Research Company Limited, 2007). Such a phenomenon is based on the fact that Thai consumers pay greater attention to health than before

(The trends of health concern, 2009). In addition, the current generation is likely to increase around 20 per cent for the next 10 years. This consumer group secures a budget to spend on these products and they are more concerned about their health than other generations. Therefore, this generation focuses on preventive health care and longevity. This situation provides an opportunity for dietary supplement products to take a higher share of the market (Thansetakit, 2011). However, the purchasing criteria of dietary supplement are on the grounds of personal needs and wants, and also the suitability for consumers' heath (The trends of health concern, 2009).

2.4 Understanding Thai dietary supplement customers

Generally, the most important reason for consuming dietary supplements is to keep healthy (Mason *et al*., 2007). There are several other reasons, which include: preventive health measures, age-associated problems and recommendations by health professionals (Mason, 2001). Similarly, some Thai consumers believe that consuming botanical supplements is beneficial to their health and also assists in disease prevention. This is consistent with a report produced by Euromonitor (2008) that consumers have been recently concerned about healthy lifestyles such as sports and beauty care. They pay more attention to the benefits of food and spend more on health products and services. Weiss (1995) suggested that food producers need to focus on quality and safety of products. Consumers are willing to pay more for such products if the products guarantee these attributes. However, Negler *et al*. (2011) argued that customers have higher confidence in drugs than

dietary supplements because they believe in expert prescriptions. Moreover, they are willing to pay more for a premium product.

Market research on dietary supplements in Thailand produced by Nielsen Company Thailand Limited (2009) reported some reasons cited by Thai people for consuming dietary supplements, which included: to boost their immune system (52%); to compensate for a known dietary deficiency (50%); and to ensure that their diet was balanced (43%). Concurrently, this market survey also demonstrated why Thai consumers did not consume dietary supplements: they did not see any need for supplements (56%). The other top reasons for not using them was that they believed they already had a balanced diet (49%), and the products were expensive (also 49%). While Thai consumers believe that consuming nutritious food is the best way for health, they also doubt the quality of dietary supplements. Thus, marketers need to convince consumers of the benefits of dietary supplements. Also marketers need to indicate that dietary supplements are more beneficial for their health than expected (Meahnmatr, 2007). At the present time, the most popular dietary supplements are the following four main types: anti-ageing dietary supplements; weight loss dietary supplements; brain-related dietary supplements; and speciality dietary supplements (e.g. diabetes related) (Matichon, 2011).

The Thai dietary supplement market could be divided into two age groups: baby boomers, and the younger generations (generations X and Y). Thai baby boomers want to consume dietary supplements because of their health concerns, while the

younger generations wish to improve their physical appearance because this consumer group believes that some dietary supplements can make them look better (Brand Age, 2010). As observed by Nayga and Reed (1999), factors affecting the intake of dietary supplements are comprised of socio-demographic, lifestyle characteristics, and attitudinal factors. Moreover, the difference in consumer behaviour in each country is specified by geographical segmentations. A different segmentation also indicates urban and rural areas, including types of target market (Schutte and Ciarlante, 1998). In most Asian countries, consumer behaviour differs from urban to rural areas. Urban people have more alternatives of products or services. They can search for information on the internet, considering advertisements and so on before they decide to purchase a product, especially higher-quality and brand-name products. By contrast, it is much more difficult for rural people to reach products or services. Most consumers with a high income reside in city areas, whereas consumers with lower incomes usually live in remote rural areas (Schutte and Ciarlante, 1998). This is also the case for Thailand, where consumers with high income are mostly Bangkok residents (Kasikorn Research Company Limited, 2007).

2.5 Chapter summary

This chapter presents a review of dietary supplements related literature. The study defined the definitions of credence products and dietary supplements, characteristics of dietary supplements as credence products, notifications of food supplements, and the overall dietary supplements market in Thailand. The overall

industry of dietary supplements in Thailand market is likely to increase and also predicted to expand from the next three or five years. This is because Thai consumers are turning their attention to their health and spend a lot more on health products than they used to. Thai consumer's behaviour toward dietary supplements as a credence product is an issue to further explore with empirical research.

Literature review, a conceptual framework, and the research hypotheses relationship are addressed in the next chapter.

Chapter 3

Literature review

3.1 Introduction

This chapter reviews the literature related to consumer decision-making processes with an emphasis on the post-purchase evaluation (P-PE) stage. In particular, it attempts to better understand the key determinants of consumer's post-purchase evaluation factors for repurchase intentions of credence products. The study has developed a P-PE model for consumers' product and consumers' brand perspectives by examining how the following P-PE factors directly or indirectly impact on repurchase intentions in the credence product context: trust, brand trust, brand experience, expectation, and satisfaction.

The literature review commences with a theoretical overview of the decision-making process in section 3.2, in which P-PE factors for repurchase intentions are elaborated, as well as the linkage between P-PE for repurchase intentions and credence products. Credence product theory is explained in section 3.3 and research gaps are identified in section 3.4. Next, the theoretical framework,

hypotheses relationships and summary of hypotheses are defined in section 3.5. Finally, the chapter is summarised in section 3.6.

3.2 Theoretical overview

The theoretical development of this study begins with an overview of consumer decision-making processes. The research concentrates on the P-PE step and theoretical linkages of P-PE factors for repurchase intentions dimensions. Then, the relationship of P-PE with credence product theory is examined.

3.2.1 Theory of consumer decision-making processes (CDP)

Consumer behaviour covers what consumers buy, why they buy (purchase reasons), frequency of buying and using the products or services, and reasons for repeating or declining their purchase products or services (Schiffman *et al*., 2010). Szmigin (2003, p. 134) observed that "understanding the consumer is about trying to get to the core of why they shop, purchase and consume the items they do in the ways they do". Consumer behaviour, also known as purchasing behaviour, is related to consumers making a final decision with regards to buying products or services (Kardes *et. al.,* 2008; Armstrong *et al*., 2009). Schiffman *et al.* (2010) conceptualised consumer behaviour as searching, purchasing, evaluating, and being satisfied with products and services. Therefore, research on buyer behaviour can provide insight into how to provide products or services in response to

consumers' needs and wants, thereby giving marketers the opportunity to gain a competitive edge (Wright, 2006).

In the age of exponential choice, consumers have changed over time (Plessis, 2007). Consumers tend to pay attention to the difference between various products, placing quality over quantity (Evans *et al.*, 1996). Moreover, consumers simply decide to buy products because they put more emphasis on products that can meet their emotional needs, rather than considering the product information (Solomon *et al*., 2002; Hawkins *et al.*, 2007). A passive recipient shifts to being an active participant, and some have developed their knowledge so well that they become experts in their areas of interest (Evans *et al.*, 1996). Consumers take products or services into more consideration than they previously did (Wright, 2006). In the developed world, it is much more difficult to assess the troubled scope of personal decision-making than in the previous generation. Most people are confronted with a variety of decisions (Crozier and Ranyard, 1997).

3.2.1.1 Consumer decision processes (CDP) models

Decision-making processes have societal and personal levels. Not only are people wary about spending money on products or services, but also they are concerned about their family and relationships, health, education and career. The economy, society, and technology also cause significant changes to the decision-making process. A foundation of modern life, collective, and corporate aspects relate to decision-making as well (Crozier and Ranyard, 1997). Generally, a decision

occurs at the product selection with two or more alternatives. Schiffman *et al.* (2008, p. 70) suggested that:

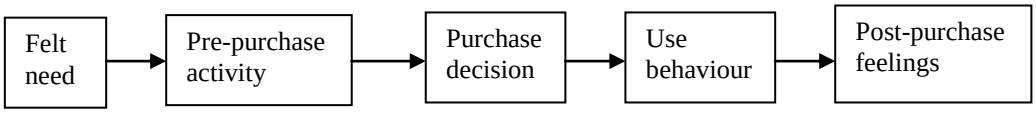
> a decision is the selection of an option from two or more alternative choices. In other words, for a person to make a decision, a choice of alternative must be available.

This means that consumers do not decide if there is no alternative to a product or service. However, a no-choice situation is fairly rare (Schiffman *et al*., 2010). Customers' feelings also have a great influence on the decision-making process. That is, customers often make a decision purchase on emotional grounds (Haddad, 1996).

Decision-making has been defined by many authors. For example**,** Zelena (1981, p. 86) stated that:

> decision making is a dynamic process: a complex search for information, full of detours, enriched by feedback from casting about in all directions, gathering and discarding information, fuelled by fluctuating uncertainty, indistinct and conflicting concepts.

A number of researchers demonstrated the decision-making process, which leads to creating comparison models. Chisnall (1985, p.164), citing Kotler (1967) and Engel *et al*. (1968), showed the decision-process models of buying behaviour as shown in Figure 3.1.



Source: Kotler (1967) cited in Chisnall (1985, p.164)

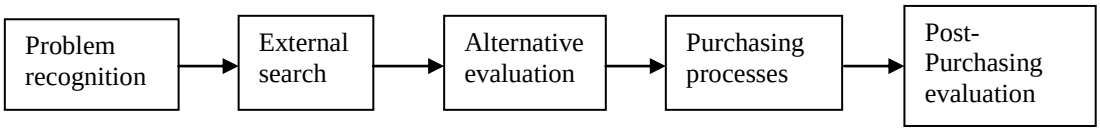


Figure 3.1: Comparative decision-process models of buying

Source: Engel *et al*. (1968) cited in Chisnall (1985, p.164)

Comparing each stage of the "logical-flow models" (Chisnall, 1985, p. 164) with the decision-process models in Figure 3.1 shows that they are similar. There are five stages of the decision-making process and explained below:

Step one: The first step in the consumer decision-making process is problem or need recognition. It will occur when consumers feel that they need products to serve some activity, need, or problem (Kardes *et al.*, 2008). As Solomon, (2004) and Schiffman *et al.* (2010) put it, aspects of problem recognition can take place in many ways and tend to occur when consumers need to solve their problems immediately

Step two: In the information search stage, after consumers develop a need and recognise it, they will plan to search information to resolve it. There are three types of information search, internal and external search; deliberate and accidental search; and the economics of information (Solomon, 2004).

Step three: The third stage is a purchase decision or evaluation of alternatives in which consumers tend to be satisfied with a product and make a decision to purchase it at the fourth stage (Chisnall, 1985). At this stage, consumers are likely to pay attention to information on brands or products and then evaluate each brand. Consumers use the criterion of product attribute to evaluate the different brands (Schiffman *et al*., 2010).

Step four: Purchasing process or use behaviour is necessary to assess the merits of competing options. When consumers are satisfied with products, they will make a decision (Schiffman *et al*., 2010). Consumers tend to choose and then purchase products more quickly if the alternatives are similar (Solomon, 2004).

Step five: After consumers decide to try a product (Solomon, 2004), they store the product information in their memories and plan to decide in the future. The post-purchase evaluation (P-PE) will then become a series of staged, comprising problem recognition, information search, and purchase decision (Kardes *et al.*, 2008). At this stage, consumers can learn about the product, based on the choices they have made. This affects the next decision in which consumers will either decide whether or not to buy the same product (Solomon, 2004). If the product does not solve their problems, P-PE will make consumers go back and reconsider the problem (Kardes *et al.*, 2008).

Theoretical linkages of P-PE factors for repurchase intention relationships are discussed in the next section.

3.2.2 Theoretical linkages of post-purchase evaluation (P-PE) factors for repurchase intention relationship dimensions

In the repeat-purchase context, customers tend to recognise a product they have previously used; it is retrievable in their memory (Chandon *et al*., 2004). The researcher needs to develop a better understanding of how P-PE factors affect customers' repurchase intention; for example, the reasons why customers with similar levels of P-PE factors repurchase at different levels; and which P-PE factors directly and indirectly influence repurchase intention.

The next section focuses on the review of literature in the area of P-PE.

3.2.2.1 An overview of post-purchase evaluation (P-PE) and repurchase intention

Post-purchase evaluation is the final stage of the decision-making process and a key component for all decision-making models. It is a complicated problem for marketing strategies and a firm will be successful if consumers trust their products. The knowledge of customers' P-PE processes is necessary for marketers to understand what customers need and want (Yuksel, 2003). Hellier *et al.* (2003) observed that, although customer repurchase intention is studied from a variety of perspectives, little is known about how repurchase intentions are related to post-purchase behaviour, particularly in the credence products context. Consumer behaviour can be evaluated by a purchase rate (or frequency of repeat purchase).

In the meantime, consumer attitudes are usually related to consumer emotions or feelings and thus could signify loyalty in many ways (Oliver, 1999) such as repurchase intention and consumer willingness to inform others and to spend more money on one product over another (Vazquez-Casielles *et al*., 2009).

Kotler and Amstrong (2011) divided post-purchase behaviour into two subgroups: post-purchase satisfaction and post-purchase actions. Repurchase intention is based on satisfaction and loyalty in post-purchase actions (Comegys *et al*., 2006). Oliver (1999) stated that post-purchase action is a concept of loyalty and satisfaction. However, Oliver (1999) admitted that consumer satisfaction does not necessarily mean consumer loyalty to a product. Marketers need to encourage consumers to return to the purchase process. Post-purchase behaviour is thus important for them to manage and create their marketing strategies so as to serve the customers' needs after purchase (Comegys *et al*., 2006).

Furthermore, consumer habit is related to consumer memory, leading to consumer routine behaviour. Consumers tend to translate the habit into their repurchasing behaviour, meaning that both habit and routine are associated with certain mental and psychological changes and affect consumer repeat purchase (Cole *et al.*, 2008). Solomon (2004) argued that choosing familiar brand names means either loyalty or habit. Many consumers tend to buy the same brand because they are too lazy to find out about other products (inertia). If they decide to buy a product they have never tried, this is usually because that the new product is cheaper than the

previous one, or because that the previous product is out of stock. Therefore, this does not always mean the start of a new habitual pattern (Solomon *et al.*, 2002).

In the meantime, trust in products or services is difficult to specify. Not only do consumers recall product information after they have used the products, but also they continue to evaluate the products and decide to purchase or get rid of the products. Marketing communications such as advertising, sales promotion, or point of purchase are significant for purchasing stimulation and brand recall (Hoyer, 1984). However, Hawkins *et al.* (2007) stated that firms have to pay more attention to consumer feelings than brand attributes, because consumers' feelings or emotions are associated with brand selection.

As seen in Figure 3.2, Sheth *et al*. (1999) demonstrated the process of post-purchase evaluation which is composed of four stages: decision confirmation; experience evaluation; satisfaction; and future response.

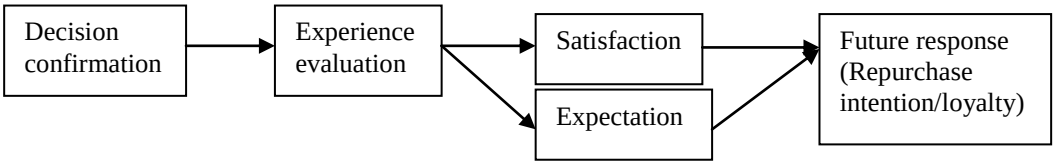


Figure 3.2: Steps of the post-purchase phase

Source: Sheth *et al*. (1999, p. 548)

At this stage, customers commit to a final decision. They need to reduce any inconsistency and confirm the soundness of their decision so they avoid negative product information and focus on product advantages instead (Sheth *et al.*, 1999). The next step is consumers' consumption experience, which is affected by the

consumer's previous feelings (Oliver, 1981). For example, consumers recognise product qualities after they try a product such as taste, comfort, and dependability (Gardial *et al*., 1994). At this step, the study assumes P-PE factors affect repurchase intentions (i.e. trust, brand trust, and brand experience, as explained in section 3.2.2.2 to section 3.2.2.4).

The next step is related to satisfaction and expectation, which is the most important point relating to consumers purchasing the same product or brand again. Moreover, satisfaction may lead consumers to tell their friends or family members about their experiences (Palmer, 2009). Expectations can lead to customer's repeat purchase, which eventually upgrades the consumer's status to brand loyalty. This offers an advantage for firms in devising marketing strategies (Yi and La, 2004). Both theories are discussed in detail in section 3.2.2.5 and section 3.2.2.6 respectively.

The final step is a future response, which focuses on repurchase intention. Many authors have defined repurchase intentions as consumers making an individual judgment to decide to whether purchase products or services again after they have already consumed some of these products or services. This decision identifies consumers who are willing to purchase products again (Zeithaml *et al*., 1996; Hellier *et al*., 2003; White and Yu, 2005). Hume and Mort (2010) argued that repurchase intention is consideration of an individual's current situation. Nevertheless, both an individual's judgment and an individual's current situation have a similar result, that is, the consumer purchases products again. Most

companies expect that consumers will repurchase, rather than switch to other products. A key important indicator to evaluate customer repurchase behaviour is customer repurchase intention (Dongjin *et al*., 2008). This research defines repurchase intention as consumers' willingness to purchase credence products again, specifically dietary supplements, either the same product from the same brand or the same product from other brands. This is also involved in customer decisions on future purchase.

Positive repurchase intentions consist of two types; first, customers intend to re-purchase products and services; and second, customers recommend it to their friends, colleagues, or family members. This is called positive word-of-mouth. Product performance represents the quality of product. If the product is wholly excellent, customers often purchase the product again (Zeithaml, 1988).

Consumers with different characteristics have different levels of satisfaction and repurchase. Response bias is high-level satisfaction with no relation to repurchase intention (Mittal and Kamakura, 2001). Usually, after consumers try a product, they will end up in a situation were either their needs have been met or have failed to be met. In any case, consumers do not evaluate the product or conduct a new search and re-evaluate the alternatives (Kardes *et al.*, 2008).

However, repeat purchase behaviour is usually associated with a specific brand or product which stems from experience or knowledge (Singh and Sirdeshmukh, 2000). According to Yi and La (2004), a firm seeks to keep existing consumers or

making consumers repurchase, which is an investment in comparison to searching for new customers. Implementing marketing strategies in order to seek new consumers is more costly than keeping existing consumers. Therefore, satisfying consumers is central for the post-purchase stage. If consumers are satisfied with a product, they will buy that product again. Therefore, it is a good method to keep consumers. On the other hand, if consumers are dissatisfied after they have tried the product, it means that the product fails (Schutte and Ciarlante, 1998). Further, if customers repurchase the same brand or product, this means brand loyalty (Sheth *et al*., 1999; Singh and Sirdeshmukh, 2000). As Jacoby and Chestnut (1978) explained, brand loyalty occurs when consumers buy products with respect to one or more brands, based on decision-making processes and post-purchase processes. However, Sheth *et al*. (1999) argued that customer satisfaction does not guarantee customer loyalty because customer satisfaction often occurs when customers gain benefits from products or services beyond their expectations (Li, 2010). Sheth *et al*. (1999, p. 552) defined the concept of loyalty as "the consistence of the brand". This concept has two dimensions. Firstly, consumers always consume the same products or services every day because the products are useful to them. Yet, they are sometimes bored or dissatisfied with the products. This behaviour is called behavioural loyalty. Business can be measured by the proportion of purchase which measures loyalty as a percentage; sequence of purchase (based on consumers switching between brands); and the probability of purchase, which depends on a history of consumer purchasing (Sheth *et al.*, 1999). Loyal customers always make a quick decision to buy the same product or brand because they have already processed the data before purchasing. This shows that

previous experience is more important than price or convenience (Kardes *et al.*, 2008). Secondly, consumers repurchase similar products because of convenience. They unknowingly develop their buying routine, and are not aware that this routine is part of their lifestyle. Some researchers advocate that loyalty is based on attitudinal terms in which consumers repeat the purchase (Sheth *et al.*, 1999). Both positive and negative attitudes can provide information to consumers for repeat purchase (Oliver, 1981). For example, Yi and La (2004) focus on the role of adjusted expectation, which is related to customer satisfaction and repurchase intention, whereas Seiders *et al*. (2005) emphasise the relationship between market characteristics and customer involvement.

In the past decade (2002-2012), there is plenty of research on P-PE in a variety of dimensions: for example, P-PE links to satisfaction, P-PE and repurchase, and P-PE in relation to brands. The current study focuses on the post-purchase evaluation using the repurchase intention dimension and attempts to examine mediating variables to fill the literature gaps as addressed in section 3.4.

A summary of examples of previous research on P-PE with a focus on repurchase intentions is presented in Table 3.1

Table 3.1 Research studies on post-purchase evaluation with focus on repurchase intentions in the past decade (2002-2012)

Study context	Authors/Year	Dimensions	Key variables
1. Online consumer's post-purchase evaluation behaviour	Atchariyachanvanich *et al.* (2006)	The factors affecting customers repurchase through the internet.	- Customer satisfaction - Perceived usefulness - Perceived incentives
	Cho *et al.* (2002)	Post-purchase evaluation factors of complaining about online and offline purchasing.	- Post-purchase evaluation - Behavioural response alternatives - Complaint behaviour
	Dholakia and Zhao (2010)	The effect of online retail store attributes on customer satisfaction and repurchase intentions.	- Pleasure - Arousal
	Frost *et al*. (2011)	The impact of collectivist and individualist factors on online repurchase intentions	- Collectivist and individualist factors
	Ha and Perks (2005)	Consumer's brand experience, brand familiarity, satisfaction and brand trust on the web.	- Customer satisfaction
	Ha *et al.* (2010)	Customer satisfaction model in online repurchase intention	- Adjusted expectation - Positive attitude - Trust
	Lee *et al.* (2011)	Service online repurchase intentions	- Trust - Reliability - Functionality
	Mattila (2003)	Satisfaction evaluations in an online manner in typical repeat-consumption situations.	Customer satisfaction
	Park *et al.* (2010)	Online customer satisfaction and repurchase intentions.	- Customer satisfaction - Repurchase intentions
	Wen *et al*.(2011)	A model for customer online repurchase intention.	- Trust - Perceived usefulness - Satisfaction - Perceived enjoyment
	Yen and Lu (2008)	Factors influencing on online auction repurchase intention.	- Disconfirmation of auctioneer - Disconfirmation of seller
	Zhou *et al*.(2009)	Website design quality and service quality affects consumers'online repurchase behaviour.	- Website design quality - Service quality
2. Offline consumer's post-purchase evaluation behaviour	Dongjin *et al*. (2008)	Services repurchasing intention in China.	- Perceived value - Customer satisfaction - Purchase interval - Switching costs
	Fornell *et al.* (2010)	The effect of customer satisfaction on consumer spending.	Customer satisfaction
	Grace and O'Cass (2004)	Post consumption evaluations and service experiences.	Service experience

Study context	Authors/Year	Dimensions	Key variables
	Grewal *et al*. (2007)	Post-purchase perceived risk and behavioural intentions in a service setting.	- Physical environment - Perceived quality of service - Perceived control
	Hume *et al*. (2007)	The factors affecting repurchase intention in a performing arts context.	- Service quality - Satisfaction
	Lin and Chen (2009)	Impact of purchase intentions on repurchase intention.	Purchase intentions
	Oh and Jeong (2004)	Travel purpose and prior experience related to the link between product performance and lodging repurchase.	- Product performance - Past experience
	Quintal and Polczynski (2010)	Factors influencing tourists returning to purchase.	- Perceived attractiveness - Quality - Value - Low risk
	Santos and Boote (2000)	Interrelationship between expectations, affective post-purchase states and affective behaviour.	- Expectation - Reference groups - Perceived risk
	Sarangapani and Mamatha (2008)	Post-purchase evaluation with respect to rural consumers.	- Customer satisfaction
	Seiders *et al.* (2005)	Relationship between satisfaction and repurchase behaviour is moderated by customer, rational, and marketplace characteristics.	- Rationale and marketplace characteristics
	Tuu and Olsen (2009)	The relationship between perceive risk and satisfaction on repurchase intentions.	- Perceive risk - Customer satisfaction
	Vanniarajan and Alleswari (2010)	Transportation and repurchase intention	- Passengers satisfaction - Repurchase intention
	Voss *et al*. (2010)	The complex relationships between satisfaction, moderating variables, and repurchase.	- Customer satisfaction - Customer characteristics - Rational characteristics - Marketplace characteristics
	Yi and La (2004)	Relationship between customer satisfaction and repurchase intention.	- Customer satisfaction - Adjusted expectation
	Yi and Gong (2009)	Effect of perceived organisational support, perceived service provider support, and perceived customer support on customer satisfaction and, in turn, repurchase intentions	- Perceived organisational support - Perceived service provider support - Perceived customer support

By reviewing post-purchase evaluation and repurchase, the literature involves a review of two key post-purchase evaluation areas: online and offline. Online consumers' post-purchase evaluation behaviour tends to focus on the context of factors influencing e-commerce. For instance, Frost *et al.* (2010) emphasised the impact of collectivist and individualist factors on online repurchase intentions. Similarly, Dholakia and Zhao (2010) examined the effect of online retail store attributes on customer satisfaction and repurchase intentions. On the other hand, offline consumers' post-purchase evaluation behaviour has been explored in several contexts (e.g. consumer products, services). The key variables also contain different aspects; for example, satisfaction, perceived risk, and service quality. For example, Yi and Gong (2009) studied the effect of perceived organisational support, perceived service provider support, and perceived customer support on customer satisfaction, and in turn, repurchase intentions. Studies on two crucial post-purchase evaluation perspectives (that is, product, and brand) with reference to repurchasing credence products specifically are rare. As a result, in order to understand these theories and the linkage between P-PE factors for repurchase intentions, this research summarises the factors which influence consumers' repurchase decisions into two consumer perspectives: product and brand.

While consumers' product perspective focuses on trust in the product, consumers' brand perspective includes brand experience and brand trust. The other factors that link to product and brand perspectives are expectation and satisfaction. The study also attempts to extend the application of P-PE factors for repurchase intention theories and models.

The study highlights the relevant P-PE theories with the objective of seeking a P-PE model for the repeat purchase of credence products in Thailand. The conceptual framework and hypothesis relationship, which create the model, are developed by reviewing the relevance of P-PE factors in the literature influencing repurchase intentions of credence product and focus group discussion results. Consequently, the research elaborates key P-PE factors in the following section.

3.2.2.2 Trust

The purpose of this section is to address the important role of trust theory in two dimensions: first, trust in products from the consumer product perspective with respect to repurchase of credence products; and second, identification of brand trust as a key factor in the P-PE context at the brand level of credence products (section 3.2.2.3). Based on this theory, the research classifies trust into two categories: trust theory; and brand trust theory, which might have some significant effects on repurchase intention. In order to better understand the trust theory, the researcher needs to define trust and its relevance in this context.

(1) Defining trust

According to the literature, trust has been defined in many ways (Moorman *et al*., 1992; Kaveh, 2012) depending on the areas of study (Rousseau *et al*., 1998). Even in the marketing field, it is hard to clearly define the term because many studies also introduced a number of definitions, which vary according to their fields

(Morgan and Hunt, 1994). Therefore, the researcher will explain the meaning of trust as drawn from many authors, and then will conceptualise trust in connection with the current study. Subsequently, the role of trust in credence products is presented.

A review of definitions of trust for this study is drawn from the purchasing context. Within the P-PE for repurchase framework, Siegrist *et al*. (2003) suggested that trust is related to product quality. When consumers respond to products, they also care about companies' or manufacturers' trustworthiness. Sirdeshmukh *et al.* (2002, p. 17) defined consumer trust as "the expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises". Rousseau *et al*. (1998, p. 395) described trust as "a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviour of another". Doney and Cannon (1997, p. 36) conceptualised trust as "the perceived credibility and the benevolence of a target of trust". Finally, Hosmer (1995, p. 393) described trust as

> the reliance by one person, group, or firm upon a voluntarily accepted duty on the part of another person, group, or firm to recognize and protect the rights and interests of all others engaged in a joint endeavour or economic exchange.

This is a quite similar to Golembiewski and McGonkie (1975, p. 133) who introduced trust as “reliance” and “confidence”.

Drawing from the above definitions, the researcher defines trust as consumers’ reliance on products because the products bring a positive outcome (Lau and Lee, 1999). Within the relationship of P-PE with the repurchase intention framework, the study considers trust from the consumers’ product perspective in product experience after purchasing. All measurements of trust are based on the reviews from Doney and Cannon (1997), Li *et al. (*2007), Lymperopoulos *et al.* (2010), Moser *et al.* (2011), and focus group results of this study. The research addresses product quality, the production process of the products, product companies, and attributes appearing on product labels (Choi and Kim, 1996).

(2) The role of trust in credence products

This study regards trust as an attribute of product perspective, specifically credence products. The researcher constructs items from the quality of products and transforms them into characteristics of credence products. Rijswijk and Frewer (2008, p. 1035) suggested that “quality and safety are classified as credence attributes”. These take place after consumer have tried or purchased the products: “they have to be taken on trust” (Blois, 1999, p. 200). As Hansen (2005) put it, the consumer can determine the benefits and their needs from product attributes. These reasons lead companies to concentrate on strategies (e.g.

competitiveness with others) (Noordewire *et al*., 1990) and also support products for long-term benefits (Ganesen, 1994).

There are many types of trust in product factors related to the current study; for example, certification from a third party organisation (Karstens and Belz, 2006), manufacturer, or reputation of the company (e.g. company success) (Choi and Kim, 1996). Additionally, most consumers buy products based on quality and safety (Rijswijk and Frewer, 2008). When consumers perceive quality in the products, it means they perceive product value (Chang and Wildt, 1994). Perceived value, customer satisfaction, and switching costs are positively related to repurchase intentions. Moreover, the perceived value is relevant to customer satisfaction while there is no relationship between costs and customer satisfaction (Dongjin *et al.*, 2008). In this sense, brand name and recommendations from others impact on consumers' decision-making (Wan *et al.*, 2012). As Peterson (1998, p. 415) pointed out, "quality and trust go together". Quality refers to "multidimensional attributes" (Anderson and Anderson, 1991, p. 148). Moreover, the perceived quality is based on consumers' knowledge, technology, and previous experience (Anderson and Anderson, 1991). High or low customer emotions such as good service and quality lead to repurchase intentions (Hume *et al*., 2007). This is consistent with Donio *et al.* (2006) who observed that trust is related to purchase behaviour. Furthermore, Morgan and Hunt (1994) stated that trust is related to consumer's positive future decision. Ha *et al.* (2010) introduced the idea that trust has a direct effect on repurchase intentions. For this reason, this research proposes the following hypothesis:

H1: Consumer trust has a direct effect on consumer repurchase intentions of credence products.

(3) Additional factors related to consumer trust in repurchase intention dimension

To understand how trust is related to other factors, this researcher also further investigates the relationship between trust and expectation, and also trust and satisfaction for repurchase intentions of credence products.

Trust and expectations are correlated (Hsu and Cai, 2009). As Rotter (1971, p. 444) put it, trust can be defined as "a generalized expectancy held by an individual or group that the word, promise, verbal, or written statement of another individual or group can be relied on". Parasraman *et al.* (1988) also supported the idea that customer expectation arises from how customers feel about products or services. Customer expectation depends on customer experience with products or services (Cadotte *et al.*, 1987; Carman, 1990). It changes over time if their product experiences change (Cadotte *et al.*, 1987). The level of expectation is involved in prior satisfaction with brand and quality of products. If customers are highly satisfied with their prior experience, their expectations will increase (Anderson and Sullivan, 1993).

Selnes (1998) was of a view that trust and satisfaction are related. Further, many studies suggested that satisfaction impacts on trust (Geyskens *et al*., 1999; Chiu *et al*., 2009; Randall *et al*., 2011; Kaveh, 2012). The link between trust and

satisfaction can maintain the connection between the manufacturers, or businesses, and customers in the long run (Morgan and Hunt, 1994; Doney and Cannon, 1997; Kim *et al.*, 2009). Kim *et al.* (2009) investigated the relationship between trust and satisfaction, and found that satisfaction is associated with trust, and also that it has a significant relationship with post-purchase behaviour in the e-commerce context. The results showed that consumer trust has a direct and an indirect impact on consumer's intentions. However, Hellier *et al*. (2003) argued that customers' previous purchase loyalty and perceived quality has no direct effect on customer satisfaction, which means that customer satisfaction does not impact on repurchase intention. Accordingly, the study hypothesises:

H2: Consumer trust has a direct effect on consumer expectations of credence products.

H3: Consumer trust has a direct effect on consumer satisfaction of credence products.

Moreover, mediator variables were chosen to test the intervention between predictor and outcome variables. The study also hypothesized two mediators (expectation and satisfaction), and how they mediate a relationship between trust and repurchase intentions. Hence, the following hypotheses are proposed.

H4: Consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence products.

H5: Consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence products.

H6: Consumer expectations have a direct effect on consumer repurchase intentions of credence products.

H7: Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.

However, other factors such as brand trust and brand experience also influence repurchase intentions of credence product in the current study. Discussion of these issues is presented in the next section.

3.2.2.3 Brand trust

During the past decade, brand trust has played a vital role in customer relationships and customer repurchasing (Selnes, 1998; Singh and Sirdeshmukh, 2000). Both practitioners and academic (Selnes, 1998; Fournier, 1998) consider the relationship between consumers and brand trust in order to investigate the role of such a relationship and its importance in repurchase of credence products. How brand trust is conceptualised and its dimensions, including how brand trust is related to other factors, is explained in the next section.

(1) Defining brand trust

A range of brand trust definitions is addressed from the brand perspective. Chaudhuri and Holbrook (2001) elaborated the idea that brand trust is a brand's performance in response to customer's expectation; these customers are satisfied with, and thus rely on, their chosen brand. Consumers rely on the performance and ability of the brand, and this is known as brand trust. This concept is similar to Morgan and Hunt (1994, p. 23), who defined the term of brand trust as "the willingness of the average consumer to rely on the ability of the brand to perform its stated function".

Delgado-Ballester (2004, p. 574) and Delgado-Ballester *et al.* (2003, p. 37) conceptualised brand trust as "the confident expectations of the brand's reliability and intentions in situations entailing risk to the consumer". Lau and Lee (1999, p. 343) explained the term as the "willingness to rely on another party in the face of risk". They also added that previous experience of a brand is important for consumer willingness to spend on their brand again (Lau and Lee, 1999). Above all, consumers are confident in their brand, leading to trust in their brand. The characteristics of brand trust may stem from a different nature. The brand trust dimension is discussed in the next section.

(2) Dimension of brand trust

A number of studies have focused on brand trust from relatively similar views. Chaudhuri and Holbrook (2001) focused on brand performance and the ability of a brand. Delgado-Ballester *et al*. (2003) and Delgado-Ballester (2004) classified brand trust into two aspects: reliability and intention. Papadopoulou *et al.* (2002), Li *et al.* (2007) and Fang *et al.* (2011) defined brand trust into two dimensions: performance competence and benevolent intentions. Thus two main characteristics of brand trust have emerged, and are summarised in Table 3.2.

Table 3.2 Dimension of brand trust

Authors	Dimension of brand trust	Definitions
Delgado-Ballester *et al*. (2003)	1. Reliability	"Reliability concerns the perception that the brand fulfils or satisfies the consumer's needs" (Delgado-Ballester *et al*., 2003, p. 37).
	2. Intentions	"Brand intentions are based on the consumer' belief that the brand would hold the consumer's interest when unexpected problems with the consumption of the product arise" (Delgado-Ballester *et al*., 2003, p. 38).
Papadopoulou *et al.* (2002); Li *et al.* (2007); Fang *et al.* (2011)	1. Competence	"The belief that the other person has the ability to do for one what one needs done" (Papadopoulou *et al.*, 2002, p. 1489). "Competence is the belief in the trustee's ability to fulfil its obligations as expected by the trustor" (Fang *et al.*, 2011, p. 483).
	2. Benevolence	"The belief that the trustee will not act opportunistically against the trustor, even given the opportunity" (Fang *et al.*, 2011, p. 483).

Adapted from Papadopoulou *et al.* (2002), Delgado-Ballester *et al*. (2003), Li *et al.* (2007), Fang *et al.* (2011).

As a result, brand trust in this study is based on the definitions of Delgado-Ballester *et al.* (2003) and Delgado-Ballester (2004), with a focus on two aspects: "brand reliability" and "brand intentions" (Delgado-Ballester, 2004, p. 575). The

study generates specific items from the brand perspective and also from concepts related to brand reliability and brand intention, elaborated in the next section.

Brand reliability is how a brand responds to consumer beliefs that the brand accomplishes its value as promised. Brand intention is based on the extent to which consumers believe that the brand would hold consumers' interests ahead of its self-interest when unexpected problems with the consumption of the product arise (Delgado-Ballester, 2004). Reliability refers to customer satisfaction with the brand or the brand's fulfilment of customer needs. Reliability is related to customers' belief in the promised value customers gain from the brand (Deighton, 1992). Brand reliability also occurs when consumers gain an unexpected benefit from a brand such as quality and problem-solving. Accordingly, brand reliability is necessary for customer trust in a brand, customer confidence with a brand, and customer satisfaction with a brand, all of which result in the brand becoming a market brand leader. In order to better understand brand trust, we have to start with brand reliability (Delgado-Ballester, 2004). According to Darby and Kami (1973), credence products are products related to trustworthy information. This is consistent with reliability as previously mentioned. Taken together, this study focuses on reliability in respect of confidentiality, expectation, and satisfaction and also assumes that those variables will be relevant to with credence products in this context.

Brand intention concerns for "customers' needs" and focuses on "benevolence and dependability" (Luk and Yip, 2008, p. 454). Dependability or trustworthiness and expertise are two main components of brand trust that can lead consumers to

trust brands. Trustworthiness represents brand sincerity. It means that after consumers try a brand, they perceive the performance of that brand to be advertised in the media. Expertise associates a brand with long experiences and training; thereby consumers perceiving the brand as having better knowledge and skills (Coulter and Coulter, 2002). Brand intentions are related to customer emotional security and brand's behaviour. In this case, consumers can recognise product quality on branded products better than unbranded ones (Cunningham *et al*., 1982). Brands and the qualities of that brand can enhance consumers' purchasing and recognition (Kirmani and Wright, 1989). Moreover, Westbrook and Oliver (1991) also confirmed that the fundamental emotion relates to specific situations and has a psychological urgency in consumer motivations. In summary, brand trust indicates the ongoing trustworthiness of a brand, which is based on different levels of customer emotion and recognition (Delgado-Ballester, 2004).

Therefore, a hypothesis relationship of brand trust and repurchase is as follows:

H8: Consumer brand trust has a direct effect on consumer repurchase intentions of credence products.

(3) Additional factors related to brand trust in repurchase dimension

Previous research suggests that there are many factors that impact consumer trust in brands, such as competence, honesty, or brand responsibility (Coulter and Coulter, 2002). Brand trust is related to consumers' perception and can respond to

consumers' need, especially, in terms of satisfaction. Brand trust has five elements. Firstly, a brand promises value and it is willing to put itself at risk. Secondly, a brand creates confidence and safety when people use it. Thirdly, consumers feel a general expectation of that from that brand. Fourthly, consequences (both positive and negative) are relevant to the brand. Lastly, the brand is reliable (Delgado-Ballester *et al*., 2003). Moreover, trust is a key factor for firms to achieve marketing strategies (Morgan and Hunt, 1994).

As for expectation, a different level of experience of products or brands has an effect on customer's expectation (Yi and La, 2004). Barber (1983) affirmed that expectation plays a vital role in consumer trust in brands. As Schiffman and Kanuk (2004) observed, customers often purchase products again when they find that their expectations are met. In terms of satisfaction with the products, brand trust, and consumer re-purchasing behaviour influence consumers' feelings (Seiders *et al*., 2005; Voss *et al*., 2010). As Yi and La (2004) put it, keeping existing consumers or making consumers repurchase is an investment, relative to searching for new ones. Furthermore, a variety of emotional responses such as excitement, pride, anger, sadness, and guilt are also relevant to a post-purchase evaluation (Havlena and Holbrook, 1986). As Oliver (1981) pointed out, a conclusion originates from a psychological state, known as emotion, and this influences satisfaction.

Customer satisfaction after consumption can be indicated by trust (McAllister, 1995). Aaker (1996) insisted that brand trust stems from consumer's satisfaction

with product performance and quality. Delgado-Ballester *et al.* (2003) provided evidence to confirm that satisfaction has a high impact on customer brand trust and also predicts the degree of customer trust in a brand. This brings about customer satisfaction or encourages customers to repurchase the same brand (Yi and La, 2004). Moreover, when consumers repurchase the same brand, it means that they have higher trust in that brand and consider that brand to be reliable (Chaudhuri and Holbrook, 2001). Previous research suggested that brand trust is related to satisfaction and customer experiences (Urban *et al,* 2000; Papadopoulou *et al,* 2001). Ha (2004) advocated that a high level of satisfaction and brand trust will lead consumers to a positive turning back to the products. Similarly, Morgan and Hunt (1994) also advocated that brand trust is related to satisfaction and can predict consumer future purchasing. Consequently, the study hypothesises are the following:

H9: Consumer brand trust has a direct effect on consumer expectations of credence products.

H10: Consumer brand trust has a direct effect on consumer satisfaction of credence products.

The study also hypothesized that these two ideas mediate a relationship between brand trust and repurchase intentions. The hypothesis assumption is presented as follows:

H11: Consumer expectations have a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence products.

H12: Consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product.

The next section reviews theory and research on brand experience, which is another key factor related to this study.

3.2.2.4 Brand experience

After consumers purchase a brand, brand experience occurs. When they gain experience as good as (or better than) the brand promises to offer them, it means that brand provides them with a promise (Brodie *et al.*, 2009). Consumers' consumption experience is illustrated by the consumers' previous feeling (Oliver, 1981). For example, consumers recognise product qualities such as taste, comfort and dependability, after they try a product (Gardial *et al*., 1994). Evaluating each brand occurs when similar products or services come from many brands. However, if consumers cannot decide which of them to buy, companies should boost sales of their products or services via promotional tools, such as advertising,

public relations, personal selling, or sales promotions (Schiffman *et al.*, 2008). Brand experience also affects consumer satisfaction (Reicheld, 1996; Oliver, 1997; Brakus *et al*., 2009).

(1) Defining brand experience

Authors have defined experience in a number of different ways. Braunsberger and Munch (1998) stated that experience occurs as consumers get used to the same products, place, or person. It can be proved by a degree of consumer expression and is related to high familiarity. Brand experience represents customer familiarity and their better knowledge of a brand (Alba and Hutchinson, 1987). Brakus *et al*. (2009, p. 53) define brand experience as:

> subjective, internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli that are part of a brand's design and identity, packaging, communications, and environments.

Within the relationship of P-PE in the repurchase intention framework, four dimensions of brand experience are discussed: sensory, affective, intellectual and bodily experience (Zarantonello *et al*., 2007; Brakus *et al*., 2009; Schmitt, 2009; Zarantonello and Schmitt, 2010). Zarantonello and Schmitt (2010, p.533) defined sensory as "visual, auditory, tactile, gustative, and olfactory stimulations provided by [a] brand". Slassi (2005) mentioned that the major reason for a consumer to

return to purchase a product again is that the brand offers tremendous quality, which can build consumers' sensory experience and makes a strong relationship between consumers and the brand. The sensory experience refers to aesthetics and sensory qualities (Schmitt, 1999) which is related to consumer behaviour research (Richins, 1997).

Zarantonello and Schmitt (2010) conceptualised affective experience as consumers' feelings or emotions aroused by a brand. The current study has proposed a model to explain the affective aspect of brand experience. In terms of affective experience, the study focuses on customers' emotions. Emotion plays a vital role in cognition, activity, and social behaviour (Bagozzi *et al*., 1999). Customer satisfaction and feeling good are two main points to indicate an emotional brand experience. This emotional experience also leads to product differentiation (Gapper, 2004). For the affective perspective, this study reviewed the literature on affective emotions in repurchase intention with a brand. An empirical study conducted by Hume *et al*. (2007) examined factors that impact on consumer's repurchase intention and found that customer's emotion and the nature of their emotional appraisal have a vital role in consumption and re-consumption in the context of performing art organisations. As Oliver (1981) put it, a conclusion originates from a psychological state, known as emotion, which influences satisfaction. Additionally, a variety of emotional responses such as excitement, pride, anger, sadness, and guilt are also relevant to post-purchase evaluation (Havlena and Holbrook, 1986). Westbrook and Oliver (1991) also confirmed that the fundamental emotion relates to specific situations and has

psychological urgency in consumer motivations. For instance, if consumers are dissatisfied with a product, they may complain to their friends or the product company. As a consequence, the feeling of dissatisfaction adversely affects their future purchases (Kincade *et al*., 1998). Addis and Holbrook (2001) posited that the degree of customer emotion and satisfaction indicate customer satisfaction with products or services.

Affective characteristics can refer to consumer's mental health, such as episode stimuli (Bower and Forgas, 2001). Affective brand experience will be successful when consumers can recover their memory, for example, a name, story, or episode that particularly consumers recall and recognise as relevant to brands (Zajonc, 1980). Chaudhuri and Holbrook's (2001) advocated that a brand affect dimension is a stimulation of consumers' emotional reaction.

For intellectual brand experience, Zarantonello and Schmitt (2010, p. 533) defined intellectual as "the ability of the brand to engage consumers' convergent and divergent thinking". The intellectual is related to consumers' thinking. Consumers perceive that their problems will be solved by products or brands. This is because consumers evaluate product features, benefits, and quality by products or brands' campaigns (Schmitt, 1999). Furthermore, the bodily experiences or behavioural dimension consists of "lifestyles and interaction with the brand" (Zarantonello and Schmitt, 2010, p. 533). As Schmitt (1999) put it, the product or brand also have marketing strategies in order to respond to consumer experience. This is an alternative way for consumers to encounter the brand (Schmitt, 1999). The present

research examines the overall effects of brand experience on consumer repurchase of credence products. Accordingly, the study hypothesises:

H13: Consumer brand experience has a direct effect on consumer repurchase intentions of credence products.

(2) Additional factors related to brand experience in repurchase dimension

Findings on brand consumption, drawn from Schembri *et al*. (2010), demonstrate that when consumers decide to consume products or brands, they have different objectives. Some of them may choose the same brand and others may consume different brands. The rationale of choosing is that consumers consider which products or brands can respond to their needs. In this regard, customer experience after consumption can occur in two ways. Consumers may do nothing at all if the products do not respond to their needs or the degree of satisfaction is not high enough for them to decide to purchase those products again. Or, consumers may be really satisfied with the products, and then they tend to repurchase and also recommended the product or service to others (Day, 1977). However, Padgett and Allen (1997) argued that consumer experience is a combination of consumer behaviour such as consumer feelings and opinions; and this behaviour takes place while consumers purchase products or services. Alba and Hutchinson (1987) supported the idea that consumers recognised their previous experience and knowledge with a brand or brand type. Further, repeat purchase behaviour is often associated with a specific brand that stems from experience or knowledge

(Singh and Sirdeshmukh, 2000). However, some researchers suggested that consumers' experience with a brand has a greater effect on their decision than their familiarity with product features or benefits, which results in consumer trust in a brand (Murphy and Smith, 1982; Weinberg, 2001).

Moreover, recognition of brands can build a deeper memory in the consumer mind and lead to customer trust in the brand. Customer satisfaction has a significant effect on brand trust and brand experience (Ha and Perks, 2005). Rust and Oliver (2000) mentioned that satisfaction and the overall evaluation of consumption experience have an impact on post-purchase expectations. Moreover, several authors also support the idea that if customers have a higher level of brand experience, brand performance increases as well (Weinberg, 2001; Murphy and Smith, 1982). In addition, the level of expectation is also involved in prior satisfaction with brand and quality of product. If the customers are highly satisfied with prior experience, expectation will increase (Anderson and Sullivan, 1993). As a result, the following hypotheses are proposed:

H14: Consumer brand experience has a direct effect on consumer expectations of credence products.

H15: Consumer brand experience has a direct effect on consumer satisfaction of credence products.

Furthermore, the study also hypothesized two mediators (expectation and satisfaction) in the relationship between brand experience and repurchase intentions. As a result, the following hypotheses are proposed.

H16: Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence products.

H17: Consumer satisfaction has a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence products.

The study needs to further explain expectation and satisfaction in the next section as well as why these two factors are important and relate to repurchase intentions for this study.

3.2.2.5 Expectation

Expectation is part of a consumer's decision and has an effect on consumers' purchase situation, in which consumers face a complicated decision to purchase something and the expectation will assist in guiding their purchasing (Tam, 2007). While expectation is a factor of post-purchase evaluation (Oliver, 1980) a retrospective view can evaluate expectation (Oliver, 1981). The concept of expectation, based on the fulfillment of a consumer's need, is similar to norm

expectations (Cote *et al*., 1989). Santos and Boote (2000) conceptualised the predicted standard expectation as the core expectations, which rely on consumers' own previous experiences, the current experiences, the experiences of others, the consumer's frame of mind and the customer feeling during purchasing. This is consistent with Yi's (1990) observation that predictive expectation has an influence on the evaluation of satisfaction about consumption experience. Boulding *et al*. (1993) contended that consumer expectations management is a strategy for firms to gain long-term achievement. Furthermore, satisfaction can be measured by consumer expectations, which are perceived through product quality (Anderson, 1973).

(1) Defining expectation

According to Yi and La (2004, p. 351), "adjusted expectations are updated after consumption experience". Additionally, some have defined expectation in terms of satisfaction or dissatisfaction (Gilly, 1979). For example, customer satisfaction has an effect on expectation after purchasing and will become an anticipation of customer repurchase intentions behaviour (Yi and La, 2004). Oliver (1981) advocated that expectation is equal to product purchase, store patronage, and complaining behaviour. Yi and La (2004, p. 355) stated that "expectations imply a dynamic nature of change as consumption experiences are accumulated". Hence, expectations are identified in this study as consumers' response to products and brands after consumption.

(2) Expectation characteristics

Day's study (1977) introduced the idea that the evaluation of satisfaction is based on expectation and is also related to three characteristics. Firstly, product experience, or performance of products consumers have tried. At this stage, promotional tools are important for businesses to promote their products to inexperienced users. Secondly, Product cost expectation affects the post-purchase evaluation as well as choice behaviour. In particular, price is very important for consumers' decision-making and also associated with consumers' evaluation. Sometimes, a high price means high quality or performance of products. A low price may indicate a low-quality product. Therefore, consumers may evaluate product quality on the basis of price. Thirdly, indirect benefits and costs mean psychological or social benefits from the products. For example, consumers feel better about themselves as they use products such as wine, brand name clothes, or gourmet food (Day, 1977).

In addition, there are three determining factors of expectation which affect satisfaction: first, the product itself, such as previous experience, brand connotations, and symbolic elements. Second, the context is communicated by salesperson or social referents (Helson, 1959, cited in Oliver, 1980, p. 461). Another possibility would be suggested when expectations can be measured in the sense of traditional feeling; for example, like-dislike, good-bad, desirable-undesirable, or attractive-unattractive scales (Oliver, 1981). To put it more simply, consumer dissatisfaction may occur if their expectation is higher than the actual

product qualities (Kardes *et al*., 2008). In such a case, a relationship between customers' needs and expectations may exist. This event does not always occur because the purchase process extends over time (Cote *et al.*, 1989).

Because of this, expectation is a post-purchase evaluation factor, which affects purchase behaviour for the next period and also influences customer satisfaction (Yi and La, 2004). Nevertheless, Oliver (1997, p. 68) argued that "the expectation, not the need, is what consumers bring to the purchase". Future purchasing behaviour and customer satisfaction result from expectation as well. Customers evaluate their expectation and satisfaction by prior expectation (Tear, 1993; Anderson and Salisbury, 2003; Yi and La, 2004). In the next section, the study introduces the relationship between expectation and other factors. Considering the role of expectation, the study focuses on repurchase intention.

(3) Role of expectation related to repurchase intentions

In this study, expectation is measured from two consumer perspectives: product and brand. In other words, the impact of measuring customers' expectation is examined from both the consumers' product perspective and the consumers' brand perspective. This research also tested the effect of satisfaction on expectation in repurchase.

Customer expectation depends on customer experience with products (Cadotte *et al.*, 1987; Carman, 1990). If their product experiences change, the expectation

changes as well (Cadotte *et al.*, 1987). For customers, expectation represents what a product provides to customers and what customers feel should be offered (Devlin *et al*., 2002). Expectation after consuming products has an affect both directly and indirectly on customer satisfaction and repurchase intention. Moreover, after customers have consumed products, customers tend to compare their expectation of products between prior and post consumption (Yi and La, 2004). Expectation directly impacts on the consumer pre-purchase and also indirectly on consumer's repurchase decision and post-purchase behaviour (Zeithaml *et al*., 1993; Gupta and Stewart, 1996; Spreng *et al*., 1996; Walker and Baker, 2000).

Customer satisfaction occurs after purchasing or consuming a product, and has a relationship with customer expectation (Sarangapani and Mamatha, 2008). The level of satisfaction is based on the degree of expectation (Oliver, 1980; Kim *et al*., 2009). However, this research also considers measuring satisfaction in the expectation framework. As Day (1977) stated, many factors are likely to relate to the formation of expectation. Moreover, Yi and La (2004) and Ha *et al.* (2010) focused on the role of adjusted expectation, which relates to customer satisfaction and repurchase intention and found that the degree of customer satisfaction at each items affects post-purchase expectation. Moreover, the relationship between customer satisfaction and repurchase intention is based on the degree of customer loyalty. Adjusted expectation has an indirect effect on both loyal and disloyal customers via satisfaction and repurchase intention. For disloyal customers,

however, the satisfaction has no significant effect on repurchase intention (Yi and La, 2004).

In conclusion, the literature review has led to the following hypotheses:

H18: Consumer expectations have a direct effect on consumer repurchase intentions of credence products.

H19: Consumer expectations have a direct effect on consumer satisfaction of credence products.

Satisfaction is an important factor for this study to focus on. It also addresses the P-PE for repurchase intentions of credence products, to be explained in the next section.

3.2.2.6 Satisfaction

In a competitive marketplace, the most important factor for consumers' decision-making on purchasing the same product or brand again is satisfaction. Moreover, satisfaction may lead consumers to share their opinions with their friends or family members (Palmer, 2009). Gardial *et al*. (1994) suggested that satisfaction can predict post-purchase behaviour. Post-purchase evaluation follows this process: in order to enlarge the recognition or previous experience from customers, firms need to provide the right product which responds to customer

demand. Alternatively, firms need to offer a new product to customers (Sarangapani and Mamatha, 2008).

(1) Defining satisfaction

Consumer satisfaction is a consequence of evaluating on product performance (Cadotte *et al.*, 1987). Fornell (1992) defined customer satisfaction as purchasing evaluation and consumption experience with an emphasis on product quality, as opposed to consumer pre-purchase expectation. Customer satisfaction is also characterised by attitudes towards products or brands. Li (2010, p. 649) pointed out that:

> customer satisfaction refers to a customer's evaluation of a specific transaction. A customer is satisfied when a purchase performs better than expected and is dissatisfied when expectations exceed performance.

Customers' previous purchasing loyalty and perceived quality has no direct effect on customer satisfaction (Hellier *et al*., 2003). As Oliver (1980) and Cadotte *et al.* (1987) suggested, future intention has significant impacts, both direct and indirect, on a customer's attitude and is related to customer satisfaction. It is widely recognised that post-purchase and post-use evaluations are related to satisfaction (Westbrook and Oliver, 1991). Satisfaction with the products, trust in the brand, and consumer re-purchasing behaviour influence consumer feelings and also make for a successful business (Chisnall, 1985; Seiders *et al*., 2005; Voss *et al*.,

2010). As Wilkie (1994) stated, satisfaction is the main reason for future purchase behaviour. Customer satisfaction is significantly relevant to repurchase intention (Oliver, 1980; Yi and La, 2004).

(2) Satisfaction characteristics

Andreasen (1977) demonstrated two main kinds of post-purchase satisfaction: customer satisfaction, and customer dissatisfaction. This research focuses on post-purchase satisfaction as the research assumes that satisfaction is the most important for customer repurchasing in comparison to dissatisfaction. The researcher needs to make the satisfaction process clear and has adapted the diagram from Andreasen(1977) as shown in Figure 3.3.

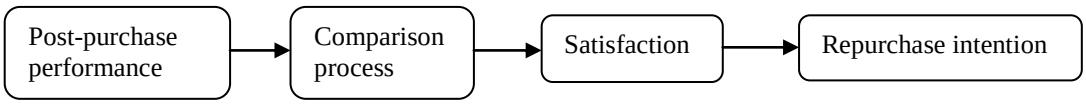


Figure 3.3 Model of post-purchase satisfaction process

Adapted from: Andreasen (1977)

Several prior studies, as mentioned in Table 3.1 have confirmed that customer satisfaction has an impact on repurchase intention (Dongjin *et al.,* 2008; Fornell *et al.*, 2010; Voss *et al.,* 2010). Customer satisfaction can retain existing customers, play a vital role in the company's profitability, and has a direct effect on repurchase intention (Hennig-Thurau and Klee, 1997; Bahia *et al.*, 2000). Patterson (2004) supported the idea that retaining customers is very important to a

company, especially in regard to customer insight, which specifies why customers repurchase the same products. However, such a situation occurs when that the product is made at the right time for the right customers (Heskett, *et al*., 1990). Moreover, post-purchase consumption, cognitive and affective aspects represent customer satisfaction (Oliver, 1997). Many investigations stipulate that customer satisfaction usually has a positive impact on customer loyalty as well as repeat purchase (Mittal and Kamakura, 2001).

Customers may also recommend the product to friends or others (Brown *et al*, 2005). When a product can deliver quality or service that meets consumers' needs or wants, it can determine consumer satisfaction because of the ability to fulfil consumers' desires (Westbrook and Reilly, 1983; Helgesen, 2006). Therefore, previous experience and fulfilled desires for the customer are related, which means that consumers may be satisfied with a product's performance because it can deliver what they desire (Cote *et al*., 1989). Consumer behaviour can be evaluated by a purchase rate or frequency of repeat purchase. Consumer attitudes usually relate to consumer emotions or feelings and thus could signify loyalty in many ways (Oliver, 1999): repurchase intentions; consumer's willingness to inform others; and to spend more money on a specific product than others (Vazquez-Casielles *et al*., 2009). The consumer attitude indicates why consumers are related to product store, or process (Oliver, 1980). Based on experimental document studies, Homburg *et al*. (2005) pointed out that customer satisfaction means consumer's willingness to spend more. However, an antecedent of satisfaction may change the consumer attitude.

Some of the most recent research focuses on mood, previous experiences (Liljander and Mattsson, 2002), effect, value and convenience (Patterson *et al.*, 1997), and customer familiarity (Soderlund, 2002) as other customer satisfaction studies address repurchase intention. Therefore, the relationship between satisfaction and customer repurchase behaviour cannot be denied (e.g. Bolton *et al*., 2006; Milttal and Kamakura, 2001). Seiders *et al*. (2005) revealed that three factors determine the relationship between satisfaction and re-purchases. Firstly, customers experience a product and companies expect customer satisfaction with their product as well as higher re-purchase rates. Secondly, relational characteristics explain the link between the number of years and customer relations to products or companies. Finally, market characteristics signify that customer competitiveness among companies affects the re-purchase pattern (Mano and Oliver, 1993). Satisfaction can be measured by consumer expectations, which are perceived through product quality (Anderson, 1973).

(3) Role of satisfaction in relation to repurchase intention dimension

Lou and Homburg (2007) suggested that repurchase intention is part of customer satisfaction. In the same way, not only is satisfaction is related to cognitive judgments, but also to emotional and affective aspects of the consumer experience (Mano and Oliver, 1993). In order to gain a better understanding of customer satisfaction and repurchase intention, this research has measured customer satisfaction in term of two main points: (1) satisfaction with brand; and (2) satisfaction with product. The research also examines product performance and

brands as mediators' links. The conceptualisation of the customer satisfaction model can lead to repurchase intentions.

Satisfaction refers to products or brands that can meet customer's needs. Customers also respond to a positive side to products or brands, and the customer's pleasure is evaluated by the level of customer fulfillment consumption (Oliver, 1997). Many authors introduced the idea that satisfaction affects consumer's purchase and repurchasing (Hirschman, 1970; Fornell, 1992; Ha *et al*., 2010). Consumers with different characteristics have a difference in satisfaction and repurchase levels. Response bias stems from a high level of satisfaction with no relation to repurchase intention (Mittal and Kamakura, 2001). Fornell *et al.* (2010) revealed that customer satisfaction has a vital role impact on customer spending growth.

Therefore, issues of customer satisfaction and repurchase intentions of credence products are used to form hypotheses from two perspectives, as follows:

H20: Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.

H21: Consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intention of credence products.

In this study, the researcher wishes to contribute to the consumption of credence products by a discussion of P-PE for repurchase dimension. Therefore, an understanding of the relationships that exist between the P-PE factors (trust, brand trust, brand experience, expectation, and satisfaction) is a key concern in this research that requires a further investigation into repurchase of credence products. A theoretical of credence product is reviewed in the next section.

3.3 Theoretical background to credence products

There is ample research on credence products in many aspects as stated in Table 3.3, and therefore credence attributes of products are important. These attributes can affect consumers' decisions. Consumers trust credence attributes even though such attributes cannot be evaluated by their use of products. Nagler *et al*. (2011) suggested that information on product labels is necessary for consumers considering any product. As Lusk *et al*. (2003) and Loureiro and Lotade (2005) observed, consumers are willing to spend more on products because of label trustworthiness, for example fair trade labels, or organic labels. Trustworthy product labelling can encourage consumers to pay more for products, especially some products which indicate safety information, side effects and quality characteristics with trustworthy references (Mabiso *et al*., 2005). Moreover, from the seller's perspective, when consumers buy a credence product, they do not trust product quality or credence characteristics. The producers should present some trustworthy evidence for consumers or provide significant data to confirm the quality of the product. For these reasons, consumers feel more confident in buying

products. Furthermore, credence products are related to credence characteristics, which are the main reasons for consumers to decide to buy the products (Andersen and Philipsen, 1998). Umberger *et al.* (2009) elaborated that consumers tend to care more about additional credence attributes of a product (e.g. production information) than inclusive information on products. Their study showed that a premium price for grass-fed beef had a significant effect on meat users who always spend money on meat. The higher price does not affect their decision. On the other hand, older people who have children do not want to pay more for a premium product. Only 10% of both targets groups are willing to buy this product. Similarly, Wirth *et al.* (2011) confirmed that producing organic apples has an insignificant effect on investment values for mass market. Moreover, the brands are important and of significant impact on credence and experience of consumers' perception (Srinivasan and Till, 2002).

On reviewing the literature, most studies have classified the contexts of credence products into three main aspects: food products, services, and websites. For food products, the experience plays a important role for consumers to judge the credence characteristics of food and to consider the qualities of products after consuming them, for example, the taste of food or nutritional composition (Grolleau, 2002). Anderson and Philipsen (1998) revealed that credence characteristics are necessary and thus have a significant effect on consumers' decision-making, for example, animal welfare affects consumer trust in free-range pork. Trust can be supportive for the products in the long run. This is consistent with Kola and Latvala's (2003) investigation, the survey results of which found

that safety and quality information are important factors for buying more beef products. Moreover, countries of origin and GMOs in production are also involved, and product safety of beef meat is a primary reason for consumers to consume it (Rosa *et al*., 2006).

Moreover, a study of Arona (2006) confirmed that if consumers are not allergic to products after they have used them for a while, they will prefer to spend money on those products. This indicates that consumers are concerned about side effects of the products. Similarly, Negler *et al.* (2011) mentioned that in comparison a between drug and dietary supplements, customers had more confidence in drugs than dietary supplements because they trust expert prescriptions rather than themselves. Moreover, they are willing to pay more for premium goods if they are suitable for vegetarians.

From a service point of view, the different consumers have a variety expectations and performance assessments of credence services. Therefore, these reasons effect services strategies and technique. The services company needs to choose the best service to respond to consumers (Garry, 2007). In the hospital service context, information from personal sources and the reputation of places affect patients' selection. Patients also trust relatives' suggestions or friends' recommendations (Kelly and Schwardz, 2005). Customers of global service firms are willing to recommend trustworthy financial firms to their family members and friends, in order to develop their firms (Eisingerich and Bell, 2005). As far as websites are concerned, an important factor for internet users to trust information on website is

accurate information. Therefore, government websites need to develop tools in order to better serve users, especially trustworthy information (Smith and Royne, 2010).

Table 3.3 Previous studies of credence products

Authors/Year	Dimensions	Study context
Anderson and Philipsen (1998)	Development of free range pork	Free range pigs
Arora (2006)	Product positioning of products which employed search, experience and credence attributes.	Teeth-whitening products
Bradford and Kleit (2011)	The impact of information and the credence of advertising on patient switching.	Prescription drugs
Eisingerich and Bell (2007)	The link of different elements between service quality, trust, loyalty, and repurchase intentions.	Financial service firm
Garry (2007)	The relationship between emotional satisfaction and credence services.	Legal service
Kelly and Schwardz, (2005)	The impact of marketing strategies on physician selection.	Health care services
Kola and Latvala (2003)	The credence characteristics of food products for consumers' willingness to pay.	Meat product
Mitra *et al*. (1999)	The relationship among three types of services, search, experience, and credence attributes.	Search service, credence service, and experience service.
Nagler *et al*. (2011)	The study investigates how consumers evaluate dietary supplements as credence goods. The study focuses on cohosh dietary supplements for menopausal women.	Black cohosh dietary supplements
Northen (2000)	The relationship between experience and credence attributes and intrinsic and extrinsic quality cues of supply chain.	Meat
Olynk *et al*. (2010)	Verification of credence attribute in livestock production	Production of pork chops and milk
Prenshaw *et al*. (2006)	The relationship between satisfaction and new, non-traditional credence-based service offering.	Assurance service
Ray *et al*. (2011)	The security assurance on online retail websites.	Online retail web sites
Rosa *et al*. (2006)	The trustworthiness of food labels between traditional butcher shop and super-hypermarket.	Food labels on meat products.
Smith and Royne (2010)	The trustworthiness of website services	Government websites
Srinivasan and Till (2002)	The effect of brand names on searches and experience consumer's evaluation.	Fruit cocktail, cranberry juice, and facial tissues
Steiner and Yang (2010)	A comparison between two different countries on credence attributes associated with beef steak labels.	Beef
Umberger *et al.* (2009)	Credence and health information are important for consumers to spend more on products.	Grass finish beef
Wirth *et al.* (2011)	The relationship between search and credence product attributes	Organic and local grown
Yavas *et al.* (2004)	Bank choice behaviour	Small and medium-sized firms in the construction industry

The credence product represents a quality of goods and services and is of higher quality in comparison to general products and services. Consumers do not know which level of quality they need, while an expert knows the qualities consumers need, so the expert can provide some particular ingredients into the products (Dulleck and Kerschbamer, 2006). Businesses can promote their products and in this regard, public sector products are easier to advertise than those in the private sector as they can be advertised in terms of product identity or national security (Carter, 1988). Under these circumstances, when consumers decide to purchase credence products, they often consider product safety and quality. A certification by a government agency or an authority of the third party is necessary for product trustworthiness. The producers can put more information about credence attributes on the products. These characteristics can be evaluated by consumers as to whether or not to trust products (Caswell and Mojduszka, 1996). However, consumers can also gain information about credence products by considering their own satisfaction after purchasing, or satisfaction after a comparison to the prior purchase (Nelson, 1970 cited in Nagler *et al*., 2011, p.238).

Two problems of credence products affect consumers, however. Firstly, when consumers need an expensive product, they are willing to spend more money on products but they may find that the products are less than their cost, expectation or product advertisement. This is under-treatment. Alternatively, consumers may need a cheaper product, yet gain an expensive one and the benefit of this product is also less than their additional cost. This leads to an increase in the product inefficiency, which is called an overtreatment. Second, credence goods represent

the producer of those products, for example, higher or cheaper costs of products are based on producer's policies or strategies. This is called overcharging. In this situation, consumers gain inefficient products, and they sometimes have to spend money on unnecessary service (Dullect and Kerschbamer, 2006).

Marketers need to pay attention to the information cost of credence products as the consumers cannot judge credence products either before or after consumption. If consumers gain more information about the credence attributes of products, the products may become credence goods (Anderson and Anderson, 1991). Previous research on credence products as services and on food products has explained that credence attributes play a vital role in services or products which address people's health, food, or safety needs. As Anderson and Anderson (1991) put it, credence attributes can enhance consumer confidence in products or services. Most consumers are concerned about product safety. The choice of the product variants is based on two factors: the available information channels; and the information of some different quality characteristics (Andersen and Philipsen, 1998). The number of quality product characteristics for consumers tend to increase in particular cases, such as food safety. Therefore, food companies need to focus on credence attributes in their products. Furthermore, credence attributes also have a significant impact on consumer purchasing and attitudes towards a product (Dentoni *et al*., 2009; Gao, *et al*., 2010). Likewise, Howcroft and Beckett (1996, p. 4) confirmed that "high credence products increase consumers' perceptions of risk because of the uncertainties associated with the performance of these products". In other words, credence properties of product attributes can lead to

consumer recognition. For example, medical products and services relevant to insurance, banks, and hospitals can be communicated as credence products. In this case, a producer's brand name needs to be reliable. Hospital service is one of the popular credence products which consumers trust and judge. In many cases, consumers cannot decline a medical service even if they think it is inappropriate for them because the service is necessary for their treatment (Hahn, 2004). In the context of bank choice behaviour, a loan officer's knowledge and competence are significantly related to credence attributes (Yavas *et al.*, 2004).

As discussed in chapter 2, this study focuses on dietary supplements as a credence product.

3.4 Research gaps identified

With the literature review and the study context, the study identifies two important gaps: literature gaps, and context of study gaps, as follows.

3.4.1 Literature gaps

The existing literature for the past ten years (2002 to 2012) studied post-purchase evaluation in typical repeat-consumption situations through mediators who responded online and those in the service dimension context (Cho *et al.*, 2002; Mattila, 2003; Ha and Perks, 2005; Atchariyachanvanich *et al.*, 2006; Dholakia and Zhao, 2009; Zhou *et al*., 2009; Chang *et al*., 2010; Ha *et al*., 2010; Wen *et al*.,

2011) Table 3.1 presents examples of P-PE research with respect to repurchase intentions conducted online and service dimension. Yen and Lu (2008) examined factors influencing online auction repurchase intentions. Wen *et al.* (2011) investigated a model for customer online repurchase intention. As for P-PE of offline literature, a number of studies also attempted to explore from either product (Soderlund, 2002; Seiders *et al*., 2005) or service perspectives (Hume *et al*., 2007; Dongjin *et al*., 2008; Quintal and Polczynski, 2010; Vanniarajan and Alleswari, 2010). There have also been a few studies on offline products from different consumer's P-PE perspectives: product and brand, specifically from the repurchase intentions framework. Some studies focused on the role of adjusted expectation in relation to customer satisfaction (Yi and La, 2004). Seiders *et al.*'s study (2005) examined the relationship between satisfaction and repurchase behaviour and how it is moderated by customer, rational, and marketplace characteristics.

As a result, it is thus necessary to fill these literature gaps on conducting data from the P-PE factors for repurchase intentions. The most important approach of this study is to clarify the model of consumer's P-PE with reference to repurchase intentions within the hypotheses testing. The research tests the direct relationship between independent variables (trust, brand trust, and brand experience) and dependent variables (repurchase intentions, in which expectation and satisfaction are important mediating variables). Finally, the P-PE model for repurchase is expected to become the main output of this study for future use.

3.4.2 Study context gaps

The present research focuses on P-PE for repurchase of credence products with respect to dietary supplements in Thailand. According to credence product theory as described in section 3.3, past research attempted to investigate credence characteristics in two main categories: credence products and credence services. For credence products, previous studies addressed food products such as meat, organic food, and so on. As for credence services, many studies concentrate on health services (e.g. hospital) or insurance services. There were few studies on health products which understand the consumers and credence product relationship with the use of P-PE factors for repurchase intentions, specifically dietary supplements in Thailand. Moreover, information on the models of Thai consumer's P-PE on a repeat purchase of credence products with respect to dietary supplements is as yet insufficient. As far as the researcher is concerned, little research has investigated the factors of P-PE that may affect repurchase intentions of credence products. The current study thus attempts to fill this gap. Moreover, this research expects to contribute to a P-PE model for repurchase of credence products. The study also considers a Western model of consumer behaviour with a far Eastern sample, in respect of Thai consumers.

In summary, in light of the current literature gaps, this research consolidates multiple mediators and dependent variables to create a theoretical framework of the relationship between P-PE factors for repurchase intention of credence products. Understanding the multiple relationships among the P-PE factors (trust,

brand trust, brand experience, expectation, and satisfaction) for repurchase intention is thus a key concern that needs to be further explored. The hypotheses are tested on the above two consumer perspectives. For consumers' product perspective, the testing is based on a direct effect of trust, expectation, and satisfaction relationships. For consumers' brand perspective, it is based on the direct effect of brand trust, brand experience, expectation and satisfaction relationships. The research covers dietary supplement users in the whole area of Thailand: north, north-east, south, and central including Bangkok and its vicinities, which presents a context gap to fill. The conceptual model including hypothesised relationships between the variables is presented in the next section.

3.5 A conceptual model and hypothesised relationships

This model has not been previously tested in credence products with respect to the dietary supplements context in Thailand. Theoretical frameworks and hypotheses of this study are based on models of post-purchase evaluation for repeat purchase by Day (1977) and Oliver (1981), Richins (1983), Westbrook and Oliver (1991), Sheth *et al.* (1999), Singh and Sirdeshmukh (2000), Delgado-Ballester *et al*. (2003), and Yi and Gong (2009). In addition, the research hypotheses are developed from both the literature review and the results of two focus group sessions conducted in Thailand on August 23rd and 28th, 2011.

An overview of the conceptual model and the hypothesised relationships present in the next section

3.5.1 An overview of the conceptual model

The conceptual model for this study is presented in accordance with two consumer perspectives: product; and brand as shown in Figure 3.4 and 3.5 respectively. This research assumes that the factors of P-PE would affect consumers' purchasing decisions; in the meantime, it also expects that this would influence repurchase intentions.

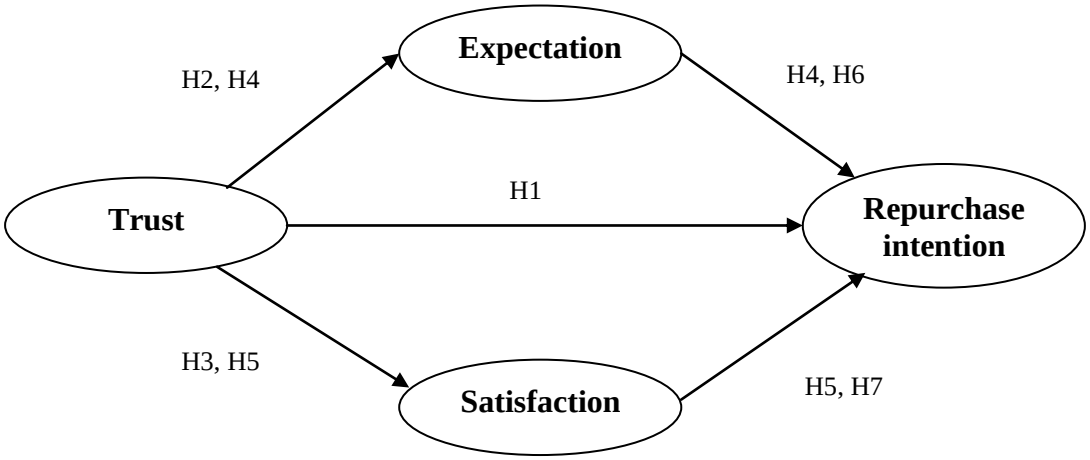


Figure 3.4 Conceptual model of P-PE factors for repurchase intention of credence products: consumers' product perspective

As seen in Figure 3.4, from the consumers' product perspective, trust, expectation, and satisfaction are employed as independent variables whereas repurchase intention is identified as a dependent variable. At the same time, the independent variables of consumers' brand perspective as presented in Figure 3.5 consist of

brand experience, brand trust, expectation, and satisfaction while repurchase intention is classified as a dependent variable.

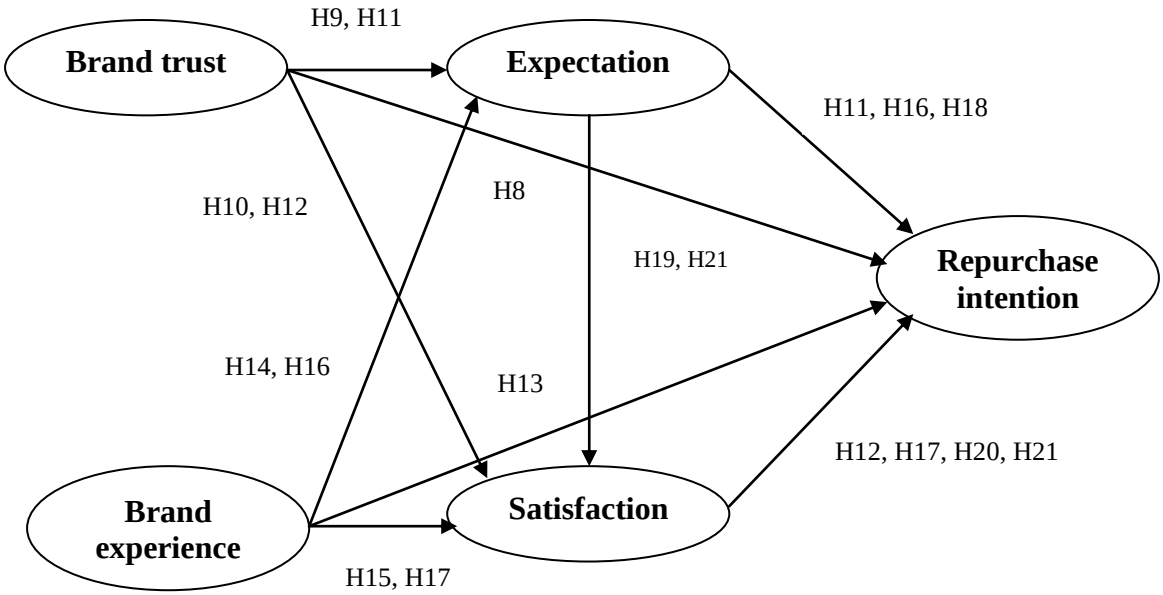


Figure 3.5 Conceptual model of P-PE factors for repurchase intention of credence products: consumers' brand perspective

3.5.2 Summary of hypotheses

The research has defined P-PE factors through an extensive literature review. Consequently, this study has generated twenty-one hypotheses in total. Thus the proposed structural paths of the model are classified into two consumer perspectives, product and brand. There are seven hypotheses for the consumers' product perspective and thirteen hypotheses for the consumers' brand perspective as presented in Tables 3.4 and 3.5 respectively.

Table 3.4 Summary of hypotheses for consumers' product perspective

	Hypotheses
H1	Consumer trust has a direct effect on consumer repurchase intentions of credence products.
H2	Consumer trust has a direct effect on consumer expectations of credence products.
H3	Consumer trust has a direct effect on consumer satisfaction of credence products.
H4	Consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions
H5	Consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence product
H6	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.
H7	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.

Source: Researcher's fieldwork

Table 3.5 Summary of hypotheses for consumers' brand perspective

	Hypotheses
H8	Consumer brand trust has a direct effect on consumer repurchase intentions of credence products.
H9	Consumer brand trust has a direct effect on consumer expectations of credence products.
H10	Consumer brand trust has a direct effect on consumer satisfaction of credence products.
H11	Consumer expectations have a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product
H12	Consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product
H13	Consumer brand experience has a direct effect on consumer repurchase intentions of credence products.
H14	Consumer brand experience has a direct effect on consumer expectations of credence products.
H15	Consumer brand experience has a direct effect on consumer satisfaction of credence products.
H16	Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence product
H17	Consumer satisfaction has a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence product.
H18	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.
H19	Consumer expectations have a direct effect on consumer satisfaction of credence products.
H20	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.
H21	Consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intentions of credence products.

Source: Researcher's fieldwork

3.6 Chapter summary

This chapter has reviewed the relevant literature in order to establish a conceptual research framework for this study and provide a context for understanding the issues of the consumer decision-making process (CDP) and P-PE factors. The first section summarised the important aspects: CDP; definitions of consumer decision-making; types of consumer decision; and views of consumer P-PE factors. Then, the theoretical framework, with emphasis on the relationship between P-PE factors and repurchase intention of credence products, has been explored. The research focused on the five situation factors in relations to P-PE: consumer trust; brand trust; brand experience; expectation; and satisfaction. It ends by addressing literature gaps while presenting a model and hypotheses relationships into two consumer perspectives: product and brand.

The following chapter will address research methodology and methods used in this study.

Chapter 4

Research methodology

4.1 Introduction

The purpose of this chapter is to justify the research philosophy and methods employed in this study. The chapter begins with a discussion of the research philosophy in section 4.2, which covers positivist ontology, epistemology, axiology, and methodological perspectives. Section 4.3 presents the research approach. Section 4.4 addresses research strategy. Section 4.5 discusses the research methods under the following headings: (1) sampling design; (2) questionnaire design; (3) data collection; and (4) data analysis methods. Ethical considerations are explained in section 4.6. Finally, section 4.7 is a chapter summary.

4.2 Research philosophy

Social sciences and research philosophy have been related for many centuries (Hughes and Sharrock, 1997). Issues involved in this relationship remain under discussion (Easterby-Smith *et al*., 2008) and also lead to new knowledge arising

from further investigations while providing better understanding of the social world (Neuman, 2006). Social science research uses numerous methods, which makes it hard to decide which kind is the best. Therefore, philosophy has a vital role for researchers in judging the approximate best approach for their research (Smith, 1998). Research philosophy is the main link between the knowledge and the process by which it is developed. In fact, philosophy is necessary for seeking answers to the research assumptions and determines the research questions so that they can lead to the research methodology (Saunders *et al*., 2009).

4.2.1 Ontological approach

Ontology is an aspect of research philosophy. Martins (2009, p. 324) identified ontology as "an enquiry to the nature of reality". Ontology relates to two main factors: (1) "social being" (Martins, 2009, p. 324) meaning, social actors respond to events as perceptions and consequent actions (Saunders *et al*., 2009; Borgerson and Schroeder, 2002); and (2) an inquiry that involves ultimate reality (Martins, 2009). Ontological categories cannot be separated from social sciences. This philosophy is prevalent in social science research philosophy because it classifies meaning and categorises social theory (Lawson, 2003) and while also explaining the relationships between the natural and social worlds (Jennings, 2010). However, the assumptions of ontology and epistemology tend to be interrelated (Mack, 2010). Based on the above literature review, the present study is social science research and has a research paradigm as the starting point to determine a research methodology in response to the research objectives and research

questions. Therefore, the positivist approach is a major research paradigm for this research, and will be further explained in the next section.

4.2.2 Positivist approach

The study is positivist, thus, the research takes a quantitative approach as a data collection technique, which means a survey design, including numeric description such as the attitudes or opinions of the respondents (Creswell, 2009). The survey research is able to gain a large number of respondents by interviewing them with the same questions (Neuman, 2006). The process begins with identifying research questions, specifying theoretical hypotheses from the literature, then choosing the best method or survey to verify the hypotheses, and lastly, making conclusions by linking the investigation to theory. This is how research processes relate to the positivist approach (Xinping, 2002). The current research drew the hypotheses from the existing literature and then generalised its findings in order to develop new knowledge. As a result, the positivist paradigm is appropriate for researchers to gain results from quantitative data. It allows researchers to seek data in order to confirm or falsify all or some parts of hypothesis tests and also extends to further research (Saunders *et al.*, 2009; Easterby-Smith *et al.*, 2008). Positivistic epistemology shows that results relating to the objectives can be expressed by human experience. Moreover, this truth also provides the basics of human knowledge (Weber, 2004). It is more reliable than other methods with reliance on statistical data (Remenyi *et al*., 1998; McNeill Chapman, 2005).

Furthermore, an epistemological issue is related to whether the question under study is acceptable or deniable knowledge. In particular, the question should be studied under the same principles, procedures, and ethos as natural sciences. Therefore, the relationship between epistemology and natural sciences cannot be denied and is known as positivism (Bryman and Bell, 2011). This current study adapts and specifies a frame of the research paradigm as summarised in Table 4.1.

Table 4.1 Summary of classification research paradigm of the study

Positivist component	Definition	Relative to the study
Ontology	Nature of reality, people Objectivism	Target population/respondents
Epistemology	Natural science model, social reality	Finding truth
Axiology	Fundamental values, consciousness	Value-free
Research approach	Principal orientation to the role of theory in relation to research.	Deductive approach and testing of theory
Research strategy,	Type of involvement with respondents.	Quantitative research
Methodology	Verification of hypotheses	Questionnaire survey
Methods	Individual techniques for data collection	A structured interview, face-to-face

Adapted from Denzin and Lincoln (1994), Deluca and Kock (2007), Easterby-Smith *et al.* (2008), and Bryman and Bell (2011)

The philosophy emphasises natural scientific models, positivism, and social reality. In this study, epistemology is a natural science model which is relative to positivism as demonstrated in section 4.2.3. Axiology is concerned about whether the research is value-laden or value-free, that is, what values the researcher is bringing to the research. Positivist research is usually value-free. Rescher (2006, p. 503) defines axiology as "the evaluative and normative assessment of the things that exist". It focuses on both subject and object. Subject represents the researchers while an object is the phenomena on which researchers concentrate

(Weber, 2004), in particular, counting of basic values, moral choices, ethics and normative judgments (Ponterotto, 2005).

In this study, since the ontology focuses on the objective, rather than the subjective, the respondents are important for the investigation. In general, quantitative methods and positivism are interrelated and are based on a deductive research approach (McGregor, 2010). In this study, the deductive approach presents a relationship between theories and assumption testing. Quantitative research can outline the research strategy and methodology with a focus on verification of hypotheses and questionnaire survey. Furthermore, this strategy unites practices and norms of both natural science models and positivism. It also incarnates a social reality perspective as an external objective reality (Bryman and Bell, 2011).

Positivism emphasises facts, confirmed by values of reason, truth and validity as it involves a quantitative method or survey and statistical analyses. Researchers are able to collect data in many ways; for instance, experiments, observation, or experience (Saunders *et al.*, 2009; Easterby-Smith *et al.*, 2008). The positivist approach has broad definitions; some authors state that it is "the approach of the natural sciences" and other authors suggest that it is "the positivist approach is science" (Neuman, 2006, p. 81). The best of the specific social theories related to positivism is the interaction between the function of structure, rationale choice, and the exchange-theory framework (Neuman, 2006). Since positivism is composed of largely deductive approaches, it involves theory testing (Bryman and

Bell, 2011). This is consistent with the hypotheses of this study. The study makes use of the so-called hypothetico-deductive method (Collis and Hussey, 2009). Poon's conclusion (2006, p. 767) supported the views of Peirce (1955, cited in Poon, 2006, p. 767) that the deductive method attempts to investigate reasons and verify a hypothesis, and then provides explanations. Therefore, the direction of deductive approach begins with concepts of study, theoretical relationship, and evidence conduction; this is how to develop and confirm a theory (Neuman, 2006). Positivism offers more effective objective methods, rather than subjective sensations (Easterby-Smith *et al.*, 2008) and allows the researchers to observe an objective reality (Mack, 2010).

To sum up, the fundamental idea of positivism is to classify problems, state a hypothesis, verify the hypothesis, and summarise the data in order to provide generalisable, law-like conclusions. This research philosophy is appropriate for the data collection and hypothesis development in this study because it will mean "working with an observable social reality and that the end product of such research can be law-like generalizations similar to those produced by the physical and natural scientists" (Remenyi *et al.*, 1998, p. 32). The assumption is that the data collection is also undertaken in a value-free way (Remenyi *et al.*, 1998). Moreover, Bryman and Bell (2011, p. 15) also reiterated that "positivism is an epistemological position that advocates the application of the methods of the natural sciences to the study of social reality and beyond". The external reality comprises of ontological and epistemological assumptions (Easterby-Smith *et al.*,

2008). This philosophy thus perfectly supports the research questions and methodology (Mack, 2010).

The positivist philosophy of the current study also addresses the ontological, epistemological, axiological and methodological approaches respectively. The philosophical assumptions of positivism also leads to study through the problems, theories and the research questions as identified in Table 4.2.

Table 4.2 Philosophical assumption of positivism

Implications	Statements	Relative to the study
Independence	The observer must be independent from what is being observed.	A structured interview, face-to-face.
Value-freedom	The choice of what to study, and how to study it, can be determined by objective criteria rather than by human beliefs and interests.	The post-purchase evaluation for repurchase intentions of credence products based on theory.
Causality	The aim of social sciences should be to identify causal explanations and fundamental laws that explain regularities in human social behaviour.	The study focuses on post-purchase evaluation behaviour and factors for repurchase intentions of credence products.
Hypothesis and deduction	Science proceeds though a process of hypothesizing fundamental law and then deducing what kinds of observations will demonstrate the truth or falsity of these hypotheses.	The hypotheses rely on two consumer perspectives: product and brand.
Operationalization	Concepts need to be operationalized in a way which enables facts to be measured quantitatively.	Quantitative research
Reductionism	Problems as a whole are better understood if they are reduced into the simplest possible elements.	The conceptual model and hypothesis relationship
Generalization	In order to be able to generalize about regularities in human and social behaviour it is necessary to select samples of sufficient size, from which inferences may be drawn about the wider population.	The generalisation results indicate the representativeness of this study is Thai dietary supplements users, with respect to vitamins, minerals, and herbs or other botanicals products from twelve provinces in Thailand.
Cross-sectional analysis	Such regularities can most easily be identified by making comparisons of variations across samples.	A comparison between consumers' product perspective and consumers' brand perspective.

Source: Comte (1853) cited in Easterby-Smith *et al.* (2008, p. 58) and researcher's fieldwork

4.2.3 Epistemological approach

In general, epistemology is defined as 'critical analysis of the origin, logic, value and consequences of scientific activity' (Boyer, 2008, p. 739). Similarly, Bryman (2008, p. 13) defined epistemology as follows: "an epistemological issue concerns the question of what is regarded as acceptable knowledge in a discipline". Meanwhile, Bryant (2000) stated that epistemology is based on historical situations and the problem issues of each of the social sciences. These events present knowledge of what has happened before and understanding of theory of social life in all its social complexity. The link between research participants and the researcher has a vital role in epistemology because positivists focus on objectivism. This means that bias cannot affect researchers and participants while investigating (Ponterotto, 2005). Easterby-Smith *et al*. (2008) suggested that in order to make enquiries into nature of the world, epistemology is the way that we learn things, in other words, positivist or interpretivist.

4.2.4 Methodological approach

Methodology means "a branch of knowledge" (McGregor and Murnane, 2010, p. 420) and also refers to the reason and assumptions of philosophy (McGregor and Murnane, 2010). The methodology of a study recounts the procedure by which researchers conduct their studies (Jennings, 2010). Meanwhile, research methods represent the technicality of research process, indicated by methodology (McGregor and Murnane, 2010). The processes and procedures to conduct

research on which the researchers draw in order to provide valid answers to the research questions are described (Remenyi *et al*., 1998; Saunders *et al*., 2009). Therefore, a structured, face-to-face interview was chosen, with all the research participants, as this survey technique gains high cooperation from the respondents and generates low problems in response rate error (Czaja and Blair, 2005). In terms of the research paradigm, such philosophy was implemented by the quantitative research methods the present research focuses on. The study developed models and then justified or rejected assumptions which are guaranteed by hypothesis testing. Consequently, the research philosophy in each category of the positivist paradigm is summarised in Table 4.3.

Table 4.3 Key dimensions in this research

Research dimensions	**Positivist**
Connection to theory and data	Deductive
Relationship with research process	Objectivity
Inference from data	Generality

Adapted from Morgan (2007)

Table 4.3 presents the key dimensions of the research philosophy used in this study. The relationship between theory and data of this study is explained by deduction, which employs a positivism paradigm. The objectivity suggests the link to the research process, which also relates to the axiological basis. Lastly, inference from the data represents an explanation in generality that links to the ontological, epistemological, and methodological bases (Hughes and Sharrock, 1997).

4.3 Research approach

This section demonstrates the research approach taken in the research design. The study began with a literature review, the theoretical framework and hypotheses based on the extant research and available theory. A deductive approach is thus used in this study. As Robson (2002) pointed out, a deductive approach is involved when hypotheses are theory-based. The deductive approach represents the most common view of the nature of the relationship between theory and research and can be taken in a very clear and logical sequence (Bryman and Bell, 2011). The deductive method needs to classify a concept and develop the items. Then the researcher assesses the items and considers which item is appropriate to analyse the correlation with the concept (Vaus, 2002). The deductive approach is related to positivism and can be adjusted to the natural sciences (Saunders *et al*., 2009). Therefore, this research has provided a positivist philosophy which relates to research methodology, and to make value-free and statistical generalisations (Hirschman, 1986).

4.4 Research strategy

The aim of the research strategy is to justify the selection of a survey research design as the most suitable data collection method for consumer opinions and behaviours of a large number of people (Easterby-Smith *et al.*, 2008). Surveys are often related to the deductive approach, which is often used in business and management research, as it allows researchers to collect quantitative data

(Saunders *et al*., 2009). As seen from the above research philosophy literature, a quantitative research method refers to a survey design which consists of numeric description of attitudes or opinions of the respondents (Creswell, 2009; Johnson and Harris, 2002), for example, personal and self concept information. This survey research design comprises three main kinds: factual, inferential and exploratory. Most factual surveys are related to market research or opinion polls. The research strategy of this study combines both inferential and exploratory surveys. The purpose of the inferential survey was to examine the relationship between dependent variables and independent variables and test the hypotheses. At the same time, the exploratory survey attempts to demonstrate reasons for using this methodology which are relevant to previous studies and the current study (Easterby-Smith *et al.*, 2008). The study collected data directly from the respondents and used face-to-face structured interviews. Completed questionnaires were collected in person by an interviewer team. This method is considered the most effective way to collect the data for a group survey (Easterby-Smith *et al.*, 2008). Moreover, interviewers were able to observe nonverbal cues from the respondents while the respondents can take participate in the questionnaire as much as they want (Robert, 2007).

The methods used for investigating the phenomena are discussed in the next section.

4.5 Research methods

Having set out the methodological framework for the study, the detail of the research method is now explained. This method is concerned with specific instruments: the development of a questionnaire, as well as the response format (Bryman and Bell, 2011). A quantitative method was chosen for the data collection of the current study with a questionnaire as the main instrument. An efficient questionnaire can gain the right respondents for the study (Dillman, 2000). The survey was administered within four regions of Thailand: central Thailand including Bangkok and its vicinity, north, south, and the north-east of Thailand. The following research methods were utilised in the current study: sampling design, questionnaire design, data collection, and methods of data analysis (Creswell, 2009).

4.5.1 Sampling design

The sampling process began with a target population, a sampling frame, sample characteristics, and a sample size, which are discussed in the next section.

4.5.1.1 Target population

To gain a standard set of data, researchers need to make clear the population and the difference between population and sample. The population represents the whole set of people relevant to the study (Easterby-Smith *et al.*, 2008). The

population of the current study covers all Thai consumers who have consumed dietary supplements and lived in the four regions in Thailand mentioned in Table 4.4 (the capital city and seventy-six provinces in Thailand were grouped into four regions based on geographical characteristics). People who live in Bangkok and the central region have more chance to earn a high income than those in rural areas. As companies often expand their business in Bangkok, new industrial facilities have moved to Bangkok and the central region as well (Dejadin and Bigotta, 2009). Therefore, this study classified the respondents by residence because consumer behaviour between rural and urban areas in Thailand tends to differ in terms of purchasing behaviour. Central Thailand including Bangkok and its vicinity consists of 25 provinces. 17 provinces are located in the north; the north-east is composed of 20 provinces; and there are 14 provinces in the south. The names of the provinces in each region are displayed in Table 4.4.

Table 4.4: Provinces in Thailand by area

Regions of Thailand	Name of Province	Number of provinces
Central Thailand including Bangkok and its vicinity	Bangkok, Samut Prakan, Nonthaburi, Pathum Thani, Phra Nakhon Si Ayutthaya, Ang Thong,Lop Buri, Sing Buri, Chai Nat, Saraburi, Chon Buri, Rayong, Chanthaburi, Trat, Chachoengsao, Prachin Buri, Nakhon Nayok, Sa Kaeo, Ratchaburi, Kanchanaburi, Suphan Buri, Nakhon Pathom, Samut Sakhon, Samut Songkhram, Phetchaburi, Prachuap Khiri Khan	25
North	Chiang Mai, Lamphun, Lampang, Uttaradit, Phrae, Nan, Phayao, Chiang Rai, Mae Hong Son, Nakhon Sawan, Uthai Thani, Kamphaeng Phet, Tak, Sukhothai, Phitsanulok, Phichit, Phetchabun	17
North-east	Nakhon Ratchasima, Buri Ram, Surin, Si Sa Ket, Ubon Ratchathani, Yasothon, Chaiyaphum, Amnat Charoen, Nong Bua Lam Phu, Khon Kaen, Udon Thani, Loei, Nong Khai, Maha Sarakham, Roi Et, Kalasin, Sakon Nakhon, Nakhon Phanom, Mukdahan, Bungkarn	20
South	Nakhon Si Thammarat, Krabi, Phangnga, Phuket, Surat Thani, Ranong, Chumphon, Songkhla, Satun, Trang, Phatthalung, Pattani, Yala,Narathiwat	14
Total		**76**

Adapted from Statistical Forecasting Bureau, National Statistical Office (2011)

4.5.1.2 Sampling frame

The sample frame for this study is people who are eligible to be sampled in the study. The second step is bias that can be used in many ways for sampling purposes (Easterby-Smith *et al.*, 2008). Moreover, Creswell (2009, p.148) observed that studies should be concerned about "potential respondents in the population". Therefore, the populations in the sample frame that the study selects were as follows:

(1) Thai consumers who have consumed dietary supplements during the

past 12 months, with an emphasis on those who have consumed three categories of dietary supplements: vitamins, minerals and herbs, or other botanicals; and

(2) Thai consumers who live in the four areas of Thailand (Bangkok and its vicinity in central Thailand, north, south, and north-east of Thailand) as mentioned in Table 4.4.

4.5.1.3 Sample characteristics

As Easterby-Smith *et al.* (2008) explained, similar characteristics of population can make for a good representativeness in sampling. A comparison of the characteristics among the differently sampled respondents was conducted to obtain the representativeness of the research samples. In addition, Bennett and Thiele (2004) indicated that the comparison between the early and late respondents should be conducted as well in order to reduce biased responses in terms of demographic characteristics. This research has classified the sample size on the basis of three variables for the study: gender, age range, and region. The classification of sample size is discussed in detail in the next section. The demographic characteristics of the sample size of the study are based on the areas of study and the following rationales.

(1) Men and women: this research seeks to investigate the model of post-purchase evaluation of credence products. It is necessary to represent Thai consumers both male and female. The sample size by gender is shown in Table 4.7.

(2) Age ranges: this research divided consumers into six ranges as shown in Table 4.8. Blackwell *et al.* (1995) advocated that the attitudes of older consumers are distinguished from those of the younger consumer, which are often based on physical appearance. This is consistent with the results of two focus group sessions in which participants of different ages tended to consume dietary supplements for different reasons.

(3) Consumption of dietary supplements: the respondents have consumed dietary supplements during the past 12 months. This period can indicate that consumers have consumed dietary supplements for a while and may explain why they repurchase them.

(4) The respondents are not patients or undergoing treatment for an illness. Thai consumers these days focus on preventive health measures, rather than going to the hospital after becoming sick (Kasikorn Research Company Limited, 2007). The research focuses on dietary supplement users only and the reasons why they repurchase them even if they are not undergoing treatment. In addition, dietary supplements are not drugs for patients (Kasikorn Research Company Limited, 2007).

(5) The respondents must be resident in one of the four regions of Thailand as shown in Table 4.4. It is important to have basic knowledge of demographic characteristics of the four regions so as to fully understand the consumer behaviour of these regions (Thailand: a vibrant market, 2005). It is

noteworthy, however, that consumers can purchase the same brand anywhere or anytime they want. Purchasing a product depends on lifestyles and how products are tailored, rather than demographic characteristics (Evans *et al.*, 1996).

4.5.1.4 Sample size

The sample size is based on the vitamin and mineral consumer population. A sample refers to a subset of a population from which the study needs to collect the data. This research classified the sample size by quota sampling and under non-probability sampling design methods. Quota sampling classifies a sample that relates to differences of characteristic such as gender, age range and socio-economic group (Bryman and Bell, 2011). As for non-probability sampling, it covers all forms of sampling and a scope of categories of sampling strategy (Bryman and Bell, 2011). These methods support the current study in deciding on the sample members and what sample sizes are needed (Easterby-Smith *et al.*, 2008). According to the survey on Health Behaviour from Food Consumption by National Statistical Office (NSO) in 2009 the mineral and vitamin consumer population was more than 7 million.

The sample process began with dividing the population into four areas. Reliable sample sizes for each area were decided on the reliability and confidence of statistical testing. This research specified the sample size based on the target population as provided by the National Statistical Office (NSO) of Thailand. Then the study selected the top three provinces of the average monthly expenditure

from 2007-2011 (5 years) per household by region and province, according to the data generated by NSO. Expenditure can indicate how much consumers spend on products and services, which is congruent with the multiple growths of products and services (Evans *et al.*, 2006). The researcher began to calculate the target population in each region and then specified into provinces, thereby, the total sample size was 504 samples. As for factor analysis, a very good sample size is not less than 500 subjects (Comrey and Lee, 1992; Tabachnick and Fidell, 2007). Hair *et al.* (2010) also suggested that a larger sample size can indicate an increased level of information trustworthiness. From the given population, the researcher determined its sample size with the table of determining sample size of Hair *et al*. (2010) (see Appendix A-7). It thus reached a minimum sample size of 350 or greater for a confidence level of 80 per cent. The level of precision is similar to that of the sampling error and can be indicated with percentage points (e.g., ±5 percent). Significance is based on a significance level of .05 (α), a power level of 80 percent, and standard errors are assumed to be twice of those of conventional correlation coefficients. The proportion of .05 is the maximum variability in a population. This degree is always used as an indicator of a conservative sample size (Hair *et al*., 2010). The sample size is shown in Table 4.5 and a summary of the study's sample sizes is displayed in Tables 4.6, 4.7, and 4.8.

Table 4.5 Sample size

Regions of Thailand	Provinces	Population	Target population	Male						Female						Total
				18-25 yrs	26-35 yrs	36-45 yrs	46-55 yrs	56-65 yrs	above 65 yrs	18-25 yrs	26-35 yrs	36-45 yrs	46-55 yrs	56-65 yrs	above 65 yrs	
Central Thailand including Bangkok and its vicinity	Bangkok	5,674,843	619,949	15	15	15	15	15	15	15	15	15	15	15	15	**180**
	Nonthaburi	1,122,627	122,642	3	3	3	3	3	3	3	3	3	3	3	3	**36**
	Chonburi	1,338,656	146,242	3	3	3	3	3	3	3	3	3	3	3	3	**36**
Total		**8,136,126**	**888,833**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**21**	**252**
North	Lumphun	403,952	44,130	1	1	1	1	1	1	1	1	1	1	1	1	**12**
	Chiang Mai	1,646,144	179,833	4	4	4	4	4	4	4	4	4	4	4	4	**48**
	Kumphaeng Phet	726,009	79,313	2	2	2	2	2	2	2	2	2	2	2	2	**24**
Total		**2,776,105**	**303,276**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**84**
Northeast	Udon Thani	1,548,107	169,123	4	4	4	4	4	4	4	4	4	4	4	4	**48**
	Nong Bua Lam Phu	502,551	54,901	2	2	2	2	2	2	2	2	2	2	2	2	**24**
	Mukdahan	340,581	37,207	1	1	1	1	1	1	1	1	1	1	1	1	**12**
Total		**2,391,239**	**261,231**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**84**
South	Phuket	353,847	38,656	1	1	1	1	1	1	1	1	1	1	1	1	**12**
	Surat Thani	1,012,064	110,563	3	3	3	3	3	3	3	3	3	3	3	3	**36**
	Songkhla	1,367,010	149,339	3	3	3	3	3	3	3	3	3	3	3	3	**36**
Total		**2,732,921**	**298,558**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**	**7**
Grand Total		**16,036,391**	**1,751,898**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**	**42**

Adapted from Statistical Forecasting Bureau, National Statistical Office (2011)

Table 4.6 Summary of sample size by region

Regions of Thailand	Sample size
North (rural area)	84
Northeast (rural area)	84
South (rural area)	84
Central Thailand including Bangkok (urban area)	252
Total	**504**

Source: Researcher's fieldwork

Table 4.7 Summary of sample size by gender

Gender	Sample size
Male	252
Female	252
Total	**504**

Source: Researcher's fieldwork

Table 4.8 Summary of sample size by age range

Age range	Sample size
18-25 years	84
26-35 years	84
36-45 years	84
46-55 years	84
56-65 years	84
above 65 years	84
Total	**504**

Source: Researcher's fieldwork

As seen in Table 4.5, the total sample size of this study was 504 and can be divided into four regions: 84 samples for northern and southern areas each and 252 samples for central area including Bangkok. In other words, both rural (northern and southern areas) and urban (central area including Bangkok) areas were 252 samples each, as shown in Table 4.6. The study also classified the sample size by gender (male and female) and age range into six age ranges. The sample size by gender is displayed in Table 4.7. Finally, the age range of the sample is illustrated in Table 4.8.

4.5.2 Questionnaire design

The questionnaire is the main tool for data collection as part of structured interviews (Lewin, 2011). The items for the questionnaire were designed based on the literature review, research questions, and objectives and then further developed after conducting the two focus group sessions and a pilot study. Focus groups and the pilot study can indicate problems (Saunders *et al.*, 2009). The original questionnaire was drafted in English and then translated into Thai. The overview of questionnaire development process is shown in figure 4.1 and will be explained in detail in the next section.

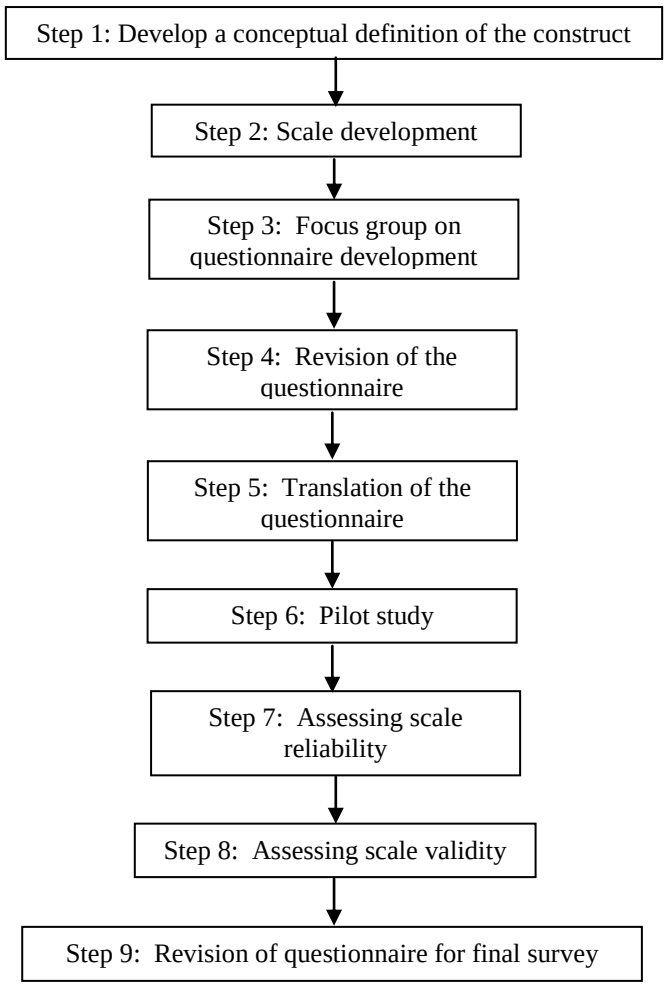


Figure 4.1 Overview of questionnaire development of this study

4.5.2.1 Conceptualization

This section presents the relationship between constructs, conceptual definition and operation definitions used in this research. Each of these definitions is related to the theoretical framework. Moreover, operational definitions depend on the results of the literature review in the previous chapter and focus group results in chapter 5. This study has classified two main dimensions: consumers' product perspective and consumers' brand perspective of credence products. In terms of consumers' product perspective, the constructs focus on degree of trust, expectation, and satisfaction that affects consumer's repeat purchase intentions of credence products in respect of dietary supplements. For brand perspective constructs, the study emphasises the degree of brand trust, brand experience, expectation, and satisfaction with purchasing products next time.

4.5.2.2 Scale development

The questionnaire for this survey consists of three-scale development. Different kinds of questions can gain different information from the respondents and they are very useful for analysing data in different ways in response to research objectives (Brace, 2004). The respondents can choose a response from multiple choice questions, which admits only three answers (e.g. yes, no, do not know). Likert scale ranging (level of agreement with a statement) or rating scales from 'strongly disagree' (1) to 'strongly agree' (7) is employed for indicating agreement or disagreement (Burton, 2000; Lewin, 2011). There are open-ended

questions which require the respondents' free opinions (Burton, 2000). Moreover, the questionnaire layout is important for researchers to collect the data. It should contain all the necessary points for the current research (Burton, 2000) and be structured logically from sections to sub-sections (Lewin, 2011). This helps both interviewees and interviewers to understand the questions (Burton, 2000).

4.5.2.3 Focus groups in questionnaire development

A focus group is a qualitative tool for gathering data or gaining more useful information from interviewees in a discussion group (Fontana and Frey, 1994). Lederman (1990) suggested that a focus group is composed of five fundamental assumptions. First, information from participants in each group is valuable. Second, the participants are able to show their ideas, emotions, and behaviours. Third, moderators can lead the participants to discussion points. Fourth, the validity and reliability of data can be established by a focus group. Last, with respect to research circumstances, data from the participants of a focus group are more effective than those from a one-on-one interview.

The purpose of focus group: The purpose of the focus groups was to explore a post-purchase evaluation with reference to repeat purchase intention and to develop a question construct for the questionnaire before doing a pilot study. Additionally, it helped identify variables that impact on post-purchase evaluation and repurchase intentions, conceptualise a theoretical framework, develop a questionnaire, and last refine the model and hypotheses (Morgan, 1988). Then the

constructs and questions posed were justified. The use of focus group discussion can also lead to a better understanding of underlying factors and the development of the hypotheses as addressed in Chapter 3. Furthermore, it enables researchers to observe the interactions between group members. Moreover, focus groups can discover the relationship between individual respondents and their social positions (Bernard, 2000). This method allows researchers to gain further information from the respondents' own words (Oates, 2000). In detail, a focus group enables researchers to observe the interactions of sample sizes between group members (Bernard, 2000; Holdaway, 2000), and to gain rich and useful data relevant to the group members' perceptions (Stewart and Shamdasani, 1990; Kress and Shoffner, 2007). Furthermore, the method offers other qualities such as flexibility, time-saving, and direct contact between respondents and researchers (Krueger, 1994).

Boddy (2005) suggested that there are two types of focus group: focus group discussion; and focus group interviews. The participants who participate in each group need to have the same area of interest, but in a focus group interview there will be a moderator. He or she will be able to direct participants toward the information needed. On the other hand, the participants of focus group discussion express their own opinions more freely than those of focus group interview, because they do not have a moderator to guide them (see Table 4.9).

Table 4.9 Type of focus group

Type of focus group	
Focus group discussion	**Focus group interview**
Participants have the same area of interest. Participants can interact with each other e.g. argue, persuade. Moderator mediates between group participants, if participants have a different view.	Participants have the same area of interest. Moderator has a vital role in discussion rather than between respondents. Moderator needs to gain more opinions from respondents in order to respond to the questions.

Adapted from Boddy (2005)

A focus group interview was chosen. The researcher recruited participants with the same area of interest because the study needs to obtain more information in order to respond to the moderator questions. In this case, the moderator had an important role in the group. Researchers may sometimes gain biased data because some respondents are silent while some other participants may talk more and persuade other (Boddy, 2005). Consumer researchers often use focus group interviews to test theories and contexts because this research tool can investigate consumers' attitudes, opinions, intentions, and behaviours (Zeithaml, 1988). However, researchers cannot gain data from both interview or discussion groups if participants do not participate or researchers recruit the wrong participants; for example, those who do not pay attention to designated topics (Oates, 2000).

Focus group process: In this research, two focus group sessions were held with the purposes of exploring key issues in consumers' experience and sensitive topics as well as testing the questionnaire before an actual survey (Cooper and Schindler, 2011). The study categorised the focus group process according to four main criteria: recruitment technique and number of participants; location of the

focus group; moderator/interviewer and interview guide; and time. These criteria are relevant to focus group strategies as shown in Table 4.10.

Table 4.10 Criteria and focus group strategies

No.	Criteria	Focus group strategies
1	Recruitment technique and the number of participants	- The researcher recruited the participants by networking via the "original contacts" (Oates, 2000, p. 190) through a strict screening questionnaire during the recruitment process. - Number of respondents per group based on theoretical numbers ranged from 8 to 12 persons as suggested by many authors (Stewart and Shamdasani, 1990; McNeill and Chapman, 2005).
2	Location of the focus group	Two focus group sessions are conducted at the Thailand Institute of Scientific and Technological Research (TISTR), a state enterprise organisation under the supervision of the Ministry of Science and Technology, Thailand. TISTR provided the study with necessary facilities and materials (e.g. meeting room, tape recorder).
3	Moderator/interviewer and interview guide	- A qualified researcher act as a moderator for this research. The moderator was chosen on the basis of his/her extensive experience in conducting market research in both public and private sectors (e.g. TISTR). - An interview guide was developed on the basis of an extensive literature.
4	Time	Approximately 90 minutes per group discussion was allowed by the moderator /interviewer.

Adapted from Oates (2000)

(1) Recruitment technique and number of respondents: The researcher recruited the respondents by using "networking or snowball sampling" (Burton, 2000, p.314) via the "original contacts" (Oates, 2000, p.190). This meant that the researcher snowballed the participants via "existing friendship" and "related groups" (Oates, 2000, p. 190) such as friends, previous colleagues or relatives friends. As a result, the respondents for group 1 (G1) were friends, previous colleagues, and friend of friends. For the eight participants in group 2 (G2), the researcher recruited colleagues at Thailand Institute of Scientific and

Technological Research (TISTR). However, all participants were qualified by strict questionnaire screening.

There were two focus groups, each of which was composed of 8 people, in accordance with the numbers suggested by previous literature (Stewart and Shamdasani, 1990; McNeill and Chapman 2005). The two focus group sessions were held with the purpose of exploring key issues in consumers' experience and sensitive topics, as well as testing the questionnaire before an actual survey (Cooper and Schindler, 2011). With this method, the participants can provide an account of their attitudes and experiences in their own words (McNeill and Chapman, 2005). Participants were composed of four age ranges: 18-30 years (2 people), 31-40 years (2 people), 41-50 years (2 people), and over fifty years (2 people). Each age range consisted of a man and a woman. Focus groups were used on the first level in the current study with Thai consumers who have consumed dietary supplements during the past twelve months or at the present time. All participants had education ranging from vocational to university levels and were not undergoing any treatment for illness. The details of focus groups are displayed in Table 4.11.

Table 4.11 Number of participants and characteristics

Participants in each focus group	**Participant characteristics of group 1 and 2**		
Group 1 with 8 participants	Age	Male	Female
Group 2 with 8 participants	18-30 years old	1	1
	31-40 years old	1	1
	41-50 years old	1	1
	> 50 years old	1	1
	- Education from vocational to university		
	- Participants have consumed dietary supplements in the past 12 months.		
	- Participants were not patients or undergoing any treatment for illness.		

Source: Researcher's fieldwork

(2) Location of the focus group: Two focus group sessions were conducted at the Thailand Institute of Scientific and Technological Research (TISTR), a state enterprise organisation under the supervision of the Ministry of Science and Technology, Thailand. TISTR provided the study with necessary facilities (e.g. meeting room, tape recorder). A tape recorder was deployed during the focus group discussions to transcribe the data. As Stewart and Shamdasani (1990); and Kress and Shoffner (2007) put it, recording a focus group discussion can supply better analysed and classified data than other documents.

(3) Moderator/interviewer and interview guide: A professional moderator can derive answers meaningful for the objectives and research questions because of his or her extensive experience (Prince and Davies, 2001). Moreover, the moderator style is key to the effectiveness of focus group as an efficient one can guide participants to respond to the questions, finish an interview in time, and generate more ideas from participants themselves (Myers, 1998). Moderators can ensure that the interview is in line with the topics of interest (Morgan, 1988). A qualified researcher will act as a moderator for this research. In the present study,

the moderator was chosen on the basis of his/her extensive experience in conducting market research in both public and private sectors (e.g. TISTR). All focus group discussions were moderated by an experienced moderator (Oates, 2000).

Focus group topics were developed on the basis of an extensive literature review on post-purchase evaluation processes for repurchase intentions. Original interview guides in connection with both research objectives and questions were drafted in English and then translated into Thai (Appendix A-1 and Appendix A-3). These guides included a screening questionnaire form for the participants to accept the interview and answer questions in the group (Appendix A-2 and Appendix A-4).

(4) Time: Approximately 90 minutes per group discussion conducted by the moderator /interviewer.

4.5.2.4 Revision of questionnaire

Having gained the results from focus group, the study revised the questionnaire into two main points, profiles of respondents and the literature sources. According to the results of two focus group sessions, age of participants was more likely than other variables to determine their answer. For example, younger participants provided different reasons to consume dietary supplements from those cited by the older participants. These young consumers did not want to keep healthy only,

but also to slow down the ageing process of body parts e.g. eyes, and facial skin. Therefore, the study revised the age range of respondents of the questionnaire, from four to six age ranges: 18-25; 26-35; 36-45; 46-55; 56-65 years old and over 65 years old. Moreover, commercials or advertising are more influential for younger participants than older ones in terms of their choice of dietary supplements. As for gender, both male and female participants tended to report similar reasons. However, it is noteworthy that all focus group participants currently live in Bangkok, Thailand and thus did not represent the Thai consumers as a whole. Hence, the research needs to further investigate differences in age range, gender, and living area of the respondents, which represent the whole of Thai consumers in the P-PE model for repurchase intention of credence products.

4.5.2.5 Translation of the questionnaire

Back translation is necessary for researchers to re-check the correctness of the questionnaire before conducting the survey and pilot study (Douglas and Craig, 2007). In the current study, empirical evidence was expected to come from Thai respondents whose mother tongue is the Thai language. Therefore, back translation into the original language allowed the researcher to ask the right questions and also gain data accuracy (Harkness, 2003). The back translation process of the questionnaire began with the questions gathered from the literature and two focus group sessions, then drafted in English. The translator graduated in a Master of Arts in Language and Communication and had worked as an International Relations Officer in a public organisation in Thailand, who

translated questionnaire in the Thai version and compared it with the original version for accuracy. The questionnaire in the Thai version was sent to two marketing researchers in Thailand, one Thai student in the United Kingdom, and ten dietary supplement users in Thailand for comments on all constructs of the questionnaire and for "help to identify problems and egregious errors in translation" (Douglas and Craig, 2007, p. 31). Douglas and Craig (2007) stated that a local academic researcher that is accustomed to the language can check the translation and detect errors. In this case, experience in the same area is significant for academic researchers to comment on the appropriateness of the questionnaire.

The translation revealed that the back translation's respondents were confused with pronouns on some questions, for example, the original question was "now that I (you) have consumed this product, my (your) needs and wants are fulfilled by this product". The study revised the questionnaire by using 'you' instead of 'I' and 'your' instead of 'my'. Finally, the translation questionnaire was finalised into the English and the Thai versions (see Appendix A-5 and Appendix A-6).

4.5.2.6 Pilot study

The pilot study was able to confirm that the questions were easy for respondents to understand and back translation of the questions ensured this. As a result, the questionnaire was further developed and revised based on the pilot study. A pilot study was conducted to test the reliability of scale items in the survey instrument by surveying dietary supplements users in Thailand. This study was collected with

50 samples from 16th -30th June 2012. All interview sessions were conducted face-to-face in Bangkok. The researcher recruited the respondents through the use of a screening questionnaire (see Appendices A-5.1 and A-5.2.1); it was very useful to screen the respondents who fitted certain characteristics to the target population (Brace, 2004). Criteria for respondents included a wide age range between 18 and more than 65 years old. All interview respondents have consumed dietary supplements during the past 12 months. The respondents were not undergoing treatment for an illness. The data was analysed by SPSS programme, version 19.0. The assessing scale reliability and scale validity and the results of the pilot study are presented in Chapter 5. The study then revised the questionnaire, after the results of this questionnaire it was completed for final survey (see Appendix A-5).

4.5.3 Constructs and literature sources

In this study, the question items were developed from two main sources: existing literature, and the results of focus groups. Moreover, a pilot study was used to further test a questionnaire. The purpose of the focus groups was to explore a post-purchase evaluation of dietary supplement consumption. Additionally, the constructs and questions posed were justified. The use of focus group discussion can also lead to a better understanding of underlying factors and the development of hypotheses. The pilot study can indicate problems arising from the samples' answering and the researcher's collection of data (Saunders *et al.*, 2009). The item scales of this study shown in Table 4.13.

This study defined post-purchase evaluation as the factors affecting consumer who are willing to purchase dietary supplements again and how to relate post-purchase evaluation factors to customers who repurchase the same products or brand. The higher the score, the stronger this factor impacted on the decision as to whether customers will repurchase. Respondents were requested to indicate their level through the use of a Likert seven-point scale in order to measure customer repurchase from “strongly disagree” (1) to “strongly agree” (7). The questionnaire consisted of four main sections: introduction, screening questions, instructions and questions. The questions included four parts: part 1 was personal factors and self-concept; part 2 was factors related to consumers’ product perspective which consisted of trust, expectation, satisfaction, and repurchase intentions; part 3 was factors related to consumers’ brand perspective which consisted of brand experience, brand trust, expectation, satisfaction, and repurchase intention and the final part was demographic background. In the first part of the survey, from part 1 question 8 and parts 2-3, the respondents were instructed to express their preference using the Likert scale. The questionnaire consists of ninety-nine items in total, which are presented in Table 4.12. The constructs and literature sources for development of factor scales are shown in Table 4.13.

Table 4.12 Questions

Section	Topic	Number of questions and items	Adapted from
Section 1	Personal factors and self-concept	8 questions 20 items	Wen *et al.* (2011) and focus group
Section 2	Trust	1 question 14 items	Doney and Cannon (1997) , Li *et al.(*2007), Lymperopoulos *et al.*(2010), Moser *et al.* (2011), and focus group.
	Expectation	1 question 5 items	Yi and La (2004) and Ha *et al.* (2010).
	Satisfaction	1 question 6 items	Cho (2002), and Ha and Perks (2005)
	Repurchase intention	1 question 8 items	Cho *et al*. (2002), Hume and Mort (2010), and focus group.
Section 3	Brand trust	1 question 8 items	Delgado-Ballester *et al.* (2003).
	Brand experience	1 question 12 items	Chaudhuri and Holbrook (2002). Brakus *et al*. (2009), and Zarantonello and Schmitt (2010)
	Expectation*	1 question 5 items	* 5 items for expectation, 6 items for satisfaction, 8 items for repurchase intentions, adapted from the same constructs and literature sources in Section 2.
	Satisfaction*	1 question 6 items	
	Repurchase intention*	1 question 8 items	
Section 4	Demographic data	6 questions	-

Table 4.13 Constructs and literature sources for development of factor scales

Theory	**Authors**	**Original constructs**	**Original Variable measurement**	**Blending constructs**	**Variable measurement**
Personal factors and self-concept	Wen *et al.*(2011)	Time spent on online shopping per week	Multi-item scales	How often have you consumed dietary supplements per day?	Multi-item scales
		Online shopping experience	Multi-item scales	How often have you consumed dietary supplements per week?	Multi-item scales
		How often have you bought dietary supplements during the past 12 months?	Multi-item scales	How often have you bought dietary supplements during the past 12 months?	Multi-item scales
		Money spent on online shopping per year	Multi-item scales	How much do you spend on dietary supplements per time?	Multi-item scales
	Focus group	What kind of dietary supplements have you consumed or bought during the past 12 months?	-	What kind of dietary supplements have you consumed during the past 12 months?	Multi-item scales
		Which form of dietary supplements that you consumed or bought?	-	What kind of dietary supplements have you consumed during the past 12 months?	Multi-item scales
	Focus group	What is the brand that you consume/use the most?	-	What is the brand that you consume/use the most?	Multi-item scales
	Wen *et al.*(2011)	Reason for shopping online	Multi-item scales	How important were the following in the choices of dietary supplements	Seven- point Likert scales

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
Trust	Li *et al*. (2007)	**Trust in quality of product:**	Five-point Likert scale	**Trust in quality of product:**	Seven-point Likert scale
		The quality of this product has been very consistent.		The quality of this product has been very consistent.	
	Focus group	The product has a good performance/quality.	Five-point Likert scale	The product has a good performance/quality.	Seven-point Likert scale
	Lymperopoulos *et al.*(2010)	**Specific:** **Trust in process**	Five-point Likert scale	**Specific:** **Trust in process**	Seven-point Likert scale
		I trust the production processes of detergent retail brands.		The production process of the product is trustworthy.	
		I trust the quality control processes of detergent retail brands.	Five-point Likert scale	The quality control process of the product is trustworthy	Seven point Likert scale
	Doney and Cannon (1997)	**Specific:** **Trust in firm:**		**Specific:** **Trust in firm:**	
		This supplier is trustworthy.	Five-point Likert scale	The firm of the product is trustworthy.	Seven-point Likert scale
		This supplier keeps promises it makes to our firm.	Five-point Likert scale	The firm of the product keeps its promises made to customers.	Seven-point Likert scale
		This supplier has a reputation for being honest.	Five-point Likert scale	The firm of the product has a reputation for honesty.	Seven-points Likert scale
		This supplier is known to be concerned about customers.	Five-point Likert scale	The firm of the product is renowned for attending to customers' needs and wants.	Seven-points Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
	Moser *et al.* (2011)	**Trust in credence attributes** Certification (e.g. FDA. , GMP.) Support normal	Five-point Likert scale	**Trust in credence attributes** The quality and safety of the safety are certified by third party organisations or governments. (e.g. FDA).	Seven-points Likert scale
	Focus group	The quality of product is certified by a third party.	-	The product is certified by standard assurances (e.g. GMP, ISO).	Seven-point Likert scale
		This brand can boost my immune system. This brand can fill a dietary gap.	-	Nutritional benefits are trustworthy (e.g. boosting the immune system, can achieve dietary balance).	Seven-point Likert scale
	Moser *et al.* (2011)	Nutritional information	Five-point Likert scale	Nutritional information is trustworthy.	Seven-point Likert scale
		Ingredients	Five-point Likert scale	Ingredient information is trustworthy.	Seven-point Likert scale ranging
		Side-effects	Five-point Likert scale	Side-effect information is trustworthy.	Seven-point Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
Expectation	Yi and La (2004)	After visiting the family restaurant, now I expect the family restaurant will provide the quality of food and service that I want to be offered.	Seven- point Likert scale	Now that you have consumed this product, this product provides the dietary supplements level that you want to be offered.	Seven-point Likert scale
		After visiting the family restaurant, now I expect that my needs and objectives will be fulfilled by visiting the family restaurant.	Seven- point Likert scale	Now that you have consumed this product, your needs and wants are fulfilled by this product.	Seven- point Likert scales
		After visiting the family restaurant, now I expect the family restaurant will provide benefits corresponding to its price.	Seven- point Likert scale	Now that you have consumed this product, it provides benefits corresponding to its price.	Seven- point Likert scale
	Ha *et al*. (2010)	Are your current expectations higher than your prior expectation?	Seven- point Likert scale	Now that you have consumed this product, your expectations are higher than before consuming it.	Seven-point Likert scale
	Yi and La (2004)	After visiting the family restaurant, how good do you expect the family restaurant to be overall?	Five-point Likert scale	Overall, the products meet your current expectation.	Seven-point Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
Customer satisfaction	Ha and Perks (2005)	I recommend the services of the site to friends or colleagues.	Five-point Likert scale	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	Seven-point Likert scale
		Providing unexpected service sometimes impresses me deeply.	Five-point Likert scale	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	Seven-point Likert scale
		I am satisfied with my decision to purchase from the website.	Five-point Likert scale	It was the right decision to purchase this product.	Seven-point Likert scale
	Cho *et al.* (2002)	Were you dissatisfied with the information content?	Seven-point Likert scale	You are satisfied with information content of this product.	Seven-point Likert scale
		How dissatisfied were you with the product?	Seven-point Likert scale	You are satisfied with the quality of this product.	Seven-point Likert scale
		Overall, how dissatisfied were you with the purchase?	Seven-point Likert scale	Overall, you are so satisfied with the product.	Seven-point Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
Brand experience	Brakus *et al*. (2009);	**Sensory items:**	Seven-point Likert scale	**Sensory items:**	Seven-point Likert scale
		I find this brand interesting in a sensory way.		You find this brand interesting in a sensory way.	
		This brand makes a strong impression on my visual sense or other senses.	Seven-point Likert scale	This brand makes a strong impression on your visual sense or other senses.	Seven-point Likert scale
		This brand does not appeal to my senses.	Seven-point Likert scale	This brand appeal to your senses.	Seven-point Likert scale
	Zarantonello and Schmitt (2010)	**Affective items:**	Seven-point Likert scale	**Affective items:**	Seven-point Likert scale
		This brand induces feeling and sentiments.		This brand induces feelings and sentiments.	
	Chaudhuri and Holbrook (2002)	I feel good when I use this brand.	Seven-point Likert scale	You feel great using this brand.	Seven-point Likert scale
	Zarantonello and Schmitt (2010)	This brand is an emotional brand.	Seven-point Likert scale	This brand is an emotional brand.	Seven-point Likert scale
	Brakus *et al*. (2009); Zarantonello and Schmitt (2010)	**Intellectual items:**	Seven-point Likert scale	**Intellectual items:**	Seven-point Likert scale
		This brand stimulates my curiosity and problem-solving.		This brand stimulates your curiosity and problem-solving.	
		This brand does not make me think**.**	Seven-point Likert scale	This brand does not make you consider much.	Seven-point Likert scale
		I engage in a lot of thinking when I encounter this brand	Seven-point Likert scale	You are engaged in a lot of thinking when you encounter this brand.	Seven-point Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
	Brakus *et al*. (2009); Zarantonello and Schmitt (2010)	**Behavioural items:** This brand results in bodily experiences.	Seven- point Likert scale	**Behavioural items:** This brand results in bodily experience.	Seven- point Likert scales
		I engage in physical actions and behaviours when I use this brand.	Seven- point Likert scale	Your body is revitalised when you have consumed this brand.	Seven- point Likert scales
	Focus group	I have recognised this brand	Seven- point Likert scale	You have recognised this brand.	Seven- point Likert scales
Brand trust	Delgado-Ballester *et al*. (2003)	**Reliability:** (X) is a brand name that meets my expectation.	Five-point Likert scale	**Reliability:** This brand meets your expectations.	Seven-point Likert scale
		I feel confidence in (X) brand name.	Five-point Likert scale	You feel confidence in this brand.	Seven-point Likert scale
		(X) is a brand name that never disappoints me.	Five-point Likert scale	This brand never disappoints you.	Seven-point Likert scale
		(X) is a brand name that guarantees satisfaction.	Five-points Likert scale	This brand guarantees my satisfaction.	Seven-point Likert scale
		Intentions: Brand (X) would be honest and sincere in addressing my concerns.	Five-point Likert scale	**Intentions:** This is an honest and sincere brand.	Seven-point Likert scale
		I could rely on (X) brand name to solve the problem.	Five-point Likert scale	You could rely on this brand for problem-solving.	Seven-point Likert scale

Theory	Authors	Original constructs	Original Variable measurement	Blending constructs	Variable measurement
		(X) brand name would make any effort to make me be satisfied.	Five-point Likert scale	This brand would make any effort to make you be satisfied.	Seven-point Likert scale
		(X) brand name would compensate me in some way for a problem with the product.	Five-point Likert scale	This brand would compensate you if any problem with this product occurs.	Five-point Likert scale
Repurchase intention	Focus group	This brand has a good performance/quality.	-	The product has a good performance and quality.	Seven- point Likert scales
		This brand makes me feel healthier.	-	The product makes you feel healthier.	Seven- point Likert scales
		This brand fulfils my need	-	The product fulfils your needs.	Seven- point Likert scales
		This brand has a reasonable price.	-	The product has a reasonable price.	Seven- point Likert scales
		Trusting the brand.	-	You have faith in this product.	Seven- point Likert scales
		This brand is convenient to buy.	-	It is convenient to buy this product.	Seven- point Likert scales
	Cho *et al*. (2002)	I am willing to purchase a product next time from the same seller if I resolve the problem.	Seven-point Likert scales	This product can solve my problems/concerns.	Seven- point Likert scales
	Hume and Mort (2010)	The probability I would choose the performing arts over other forms of entertainment.	Interview	Overall, you intend to continue buying this product, rather than any alternative.	Seven- point Likert scales

4.5.4 Data collection

The study was conducted in four regions in Thailand which has a total vitamin and mineral user population of 7 million, as mentioned in Table 4.5. At this stage, drug-stores and health shops that sell dietary supplements in each region were probably the best source to recruit appropriate respondents. This is similar to the current study's focus group results which revealed that most of the participants buy dietary supplements at drug-stores. The researcher designated interviewers who are well-trained in the questionnaire and the research topics, at the participating drug stores and health shops, so that they were able to conduct an interview or ask questions based on the questionnaire with the sampled respondents. The respondents could answer the questionnaire at their convenience (Czaja and Blair, 2005). The target respondents were consumers familiar with dietary supplements. The researcher interviewed the respondents by a structured interview conducted face-to-face, which was the most effective way to gain cooperation from the respondents in the survey (Burton, 2000) and interviewers also controlled the questions (Czaja and Blair, 2005). This method also noted the context, reduces bias and better suits the respondents (Burton, 2000; Czaja and Blair, 2005).

4.5.5 Methods of data analysis

The process of analysis began with calculating the data by SPSS 19.0 in line with the research objectives of the study. The data screening was measured with the

Kurtosis index, and then the reliability was tested with Cronbach's alphas (α) coefficient. The research chose exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) to test construct validity. Structural equation modelling and regression analysis were employed to test the assumptions of the model, having explored the data using descriptive and inferential statistics.

4.5.5.1 Data screening

The data screening in this research, conducted with the SPSS 19.0 programme, showed the acceptable and missing data. If the missing value was less than 10%, those data were acceptable. On the other hand, if the missing value of data screening was more than 10%, the researcher needed to revise it again before testing the hypothesis or summarising the descriptive statistics (Field, 2009).

Moreover, this research screened the data by the normal value of the standardized skewness and Kurtosis's index. Skewness and Kurtosis are the two main ways that can indicate whether a distribution deviates from normal or positive and negative values (Field, 2009). Field (2009) indicated a normal value for of this at 0. According to Kline (2005), skewness and Kurtosis standard value indicated normal at 3, a positive direction was a value larger than 3.0, while a negative skewness and Kurtosis was a value less than 3.0.

4.5.5.2 Reliability

In line with accepted research practice (Kline, 2005; Hair *et al*., 2010), Cronbach's alphas (α) coefficient was used to evaluate the reliability for each construct item. In general, the acceptable value of the level reliability was α >= 0.80. In some cases, values of 0.6 or 0.7 might be acceptable (Easterby-Smith *et al.*, 2008; Hair *et al*., 2010).Further, all the alpha results with values that were greater than 0.80 indicated the acceptance level of reliability (Easterby-Smith *et al.*, 2008). The value of more than 0.30 of Corrected Item-Total Correlation indicated that the item correlated well (Kline, 2005).

Further**,** survey reliability can help researchers develop a good quality questionnaire. There are three options researchers can choose for determining the survey reliability (Burton, 2000). First, test-retest reliability is normal for a survey and can be used in specific questions. The results of correlation of coefficient value can compare the two or more answers in determining which is suitable for the measurement. Second, an alternate form provides a solution to reduce the practice effect, which is the best after researchers finish test-retest reliability. In addition, internal consistency supports how the different questions can be measuring in the same issue (Burton, 2000).

4.5.5.3 Validity

Validity is relative to the measurement of score. It can occur in both situations: what researchers have to or are supposed to measure; and what the researchers are not supposed to measure (Thomson, 2003). The original validity consists of three types: content, criterion, and construct (Creswell, 2009). Criterion validity refers to an investigation of findings, which presents a relationship between a measure and a criterion. This validity often focuses on a statistical relationship (Rubio *et al*., 2003). In this research, the construct validity was chosen to test and measure the validity. It refers to whether or not the data collection is related to the research questions of the study (Lewin, 2011) and will be explained in the next section.

(1) Construct validity

Construct validity stands for the relationship between the degree of theory and the variables (Johnson and Harris, 2002). In the current study, the items and constructs of questionnaire were developed based on other studies in different contexts and situations. Moreover, some items of measure were created from the results of two focus group sessions. Thus, the construct validity of the current study may change and become different from what is originally planned. The use of construct validity helps identify the instruments. As Creswell (2009) put it, construct validity is supported by the score and can create a good instrument for survey research. Anastasi and Urbina (1997, p. 126) described construct validity as "the extent to which the test may be said to measure a theoretical construct or

trait". After the data collection, the present study re-evaluated the overall model fit by confirmatory factor analysis (CFA) in the same way as CFA was used to evaluate the construct validity before conducting data collection. The researcher was able to verify all measurement variables. After that, the study continued to evaluate the measurement model by path analysis.

4.5.6 Statistics in this research

Descriptive statistics describe characteristics of the sample such as percentage of people, means, and standard deviations (SD) (Gayle, 2000). In this study, SD was utilised to test any scale of the measurement, in which the measurement items confirm a fit. If the data points are close to the mean, this is a small SD indicating that the data is a good fit. On the other hand, if the alternative is a large SD, the data points are distant from the mean, suggesting that the data is a poor fit (Field, 2009). Moreover, inferential statistics, which make some statistical generalisations about social world dimensions (Gayle, 2000), were used in this study. Multivariate data analysis, an inferential statistical method, was used in the current research as it focused on structural equation modelling (SEM) and regression analysis.

4.5.6.1 Exploratory factor analysis (EFA) and confirmatory factor analysis (CFA)

Factor analysis is "an interdependence technique" (Hair *et al*., 2010, p. 94) and it is used for looking at the construct validity of question items. Two instruments of factor analysis were chosen to evaluate the construct validity of the measurement model: exploratory factor analysis (EFA); and confirmatory factor analysis (CFA). This study used EFA to examine the link between the observed variables and the underlying factors. As for CFA, it can improve on how the measurement model fits the data (Easterby-Smith *et al.*, 2008). The researcher conducted CFA of the overall measurement model with all constructs of the questions. Most latent variables were confirmed by CFA in advance before data analysis with any statistic tools (Hair *et al*., 2010). Moreover, CFA assists researchers in testing the hypothesised interaction among observed variables and their underlying latent constructs (Easterby-Smith *et al.*, 2008).

4.5.6.2 Structural equation modelling (SEM)

SEM is a multivariate technique to indicate multiple variable relationships, together with factor analysis and multiple regression. This research used SEM to explore the relationship between dependent and independent variables. The researcher needed to test the model with a specialised software package (e.g. AMOS) (Hair *et al*., 2010). The main objective of SEM is to test the relationship of multiple equations and also measure whether or not the model fits or

anticipates the precision of other statistics; and which one is appropriate for SEM. The researcher needed to accept or decline the whole model, after any specific relationship was verified and the result of testing model fit was acceptable. However, if the observed covariance matrix and estimated covariance matrix were consistent, this meant that the model was appropriate. After the data collection, the researcher re-evaluated the overall model fit by a confirmatory factor analysis (CFA) in the same way that CFA was used to evaluate the construct validity before conducting data.

It was important for evaluating the model fit by Goodness-of-Fit (GOF) (see Chapter 6), suggesting that the model of study can repeat the observation of covariance matrix between the indicator items. A number of assessment indices were used to assess the validity of the model fit. After that, the study continued to evaluate the measurement model by path analysis (Hair *et al*., 2010). This research used SEM to test the validity of the constructs of measurement and identify the model relationship between independent and independent variables. After the data collection, the study re-evaluated the overall model fit by confirmatory factor analysis (CFA), in the same way as CFA was used to evaluate the construct validity before conducting data collection. The researcher was able to verify all measurement variables. After that, the study continued to evaluate the measurement model by path analysis, which is one statistical technique of SEM, which examines the hypothesised relationship between variables (Kilne, 2005).

4.5.6.3 Regression analysis

This research used multiple regression analysis to analyse the relationship between a single dependent variable and several independent ones while employing simple and multiple regression analysis to test the hypotheses. Hierarchical regression analysis is the statistical technique to test assumptions that are relevant to two or more independent variables. The purpose of simple and multiple regression analysis was to examine the hypothetical relationship between P-PE factors for repurchase of credence products. In this research, the aim was to identify the P-PE model of credence products and also to examine the significance of the relationships. The hypothesis testing was based on the previously theoretical hypotheses called "theory-based hypotheses" (Wampold and Freund, 1987, p. 377). Consequently, a hierarchy method of multiple regressions was chosen for testing such a specific theoretical assumption and the impact of a set predictors on dependent variables (Peteocelli, 2003), multiple regression analysis as "a dependence technique" (Hair *et al.*, 2010, p. 161). Moreover, mediator variables were chosen to test the intervention between predictor and outcome variables. A mediator variable explains how it mediates a relationship between independent and outcome variables (Holmbeck, 1997). In order to seek the mediation relationship, the research tested the relationship between independent and dependent variables, then hypothesized the relationship between mediator and dependent variables, and finally tested the mediation relationship between independent and dependent variables by controlling the mediator.

Four main aspects were investigated: (1) independent variables with a direct effect on dependent variables; (2) independent variables with a direct effect on mediators; (3) mediators with a direct effect on dependent variables and; (4) mediators with a significant effect on the relationship between independent variables and dependent variables.

4.6 Ethical considerations

Ethical considerations are necessary for social science research (Crow, 2000). After having set the research methods but before collecting data, researchers have to indicate and make clear the personal moral position of the study in order to reduce conflict between moral principles (Easterby-Smith *et al.*, 2008). This is because the respondents often decline sensitive questions or racist and sexist settings (Borgerson and Schroeder, 2002). Lewis and Speck (1990, p. 219) state that "ethics is concerned with moral obligation, character, responsibility; social justice; the good life". Researchers need to be ethical and "pursue right conduct, to fulfil one's moral obligations and responsibilities, to seek social justice and the good life" (Lewis and Speck, 1990, p. 219). Furthermore, ethical issues are associated with informed consent, a statement from the respondents to agree with information collection of the study and also an authorisation for the interviewers to gather data for research. This statement or form is based on principles of autonomy by which researchers need to protect the rights of the respondents. Such protection contains five elements: information; understanding; voluntariness; competence of potential participants; and actual consent to participate (Kent,

2000). Besides, there are many factors with an impact on ethics on decision-making and consumer behaviour such as personal factors, inter-organisation factors, and issues related factors and extra-organisational factors (Kavali *et al*., 1999). In the present study, personal factors are associated with the respondents' demographic data: age range, gender, income, education, occupation, social status, person factors and self concept. Another aspect is personal factors and self-concepts related to personal experience of the products. This study used consent forms for the focus group sessions (see Appendix A-2), pilot study, and official survey (see Appendix A-2.2) and all of the forms were authorised by the participants and respondents. Moreover, the researcher also made the commitments and guidelines clear to the respondents (Easterby-Smith *et al.*, 2008).

4.7 Chapter summary

This chapter has explained research methodology while examining an appropriate philosophy, approach and research strategies for the study. A positivism paradigm of research philosophy is appropriate for deductive research studies. The epistemology of this research is further explained by the fundamentals of positivism: ontological, axiological and methodological. As for the research approach, it also focuses on a deductive approach with the research strategy of face-to-face structured interview. The questionnaire was the main instrument for this research.

Data collection consists of sampling design which classifies the target population, sample frame, sample characteristics, and sample size. The questionnaire constructs were developed with a literature review, two focus group sessions, and a pilot study. Before conducting an official survey, the researcher tested the validity of the survey using CFA and EFA. The reliability was tested by Cronbach's alphas (α) coefficient. The questionnaire in this research was created in English, translated into Thai, and then confirmed by back translation. It contains four parts, twenty-three questions and 92 subscale items.

The research collected data from the respondents by face-to-face interviews. Statistics used in this research were composed of CFA, SEM, and regression analysis to test the hypotheses for the model fit. SPSS was the main programme for regression analysis while CFA and AMOS 19.0 programmes were analytical tools to test the SEM. The study used CFA to evaluate the measurement variables. In terms of SEM, the research focused on measurement of the construct relationship and path analysis (PA) in order to test the hypotheses. Finally, regression analysis is a key tool for predicting the relationship between post-purchase evaluation factors and repurchase intentions of dietary supplements in connection to credence products.

The following chapter addresses the preliminary finding, focus group and pilot study of this study.

Chapter 5

Preliminary findings: focus group and pilot study

5.1 Introduction

This chapter reports preliminary findings from the focus groups and pilot study. The results of two focus group sessions are explained in section 5.2. Section 5.3 interprets the pilot study findings, especially the reliability and validity test. Finally, the chapter is summarised in section 5.4.

5.2 Focus group results

This study administered two focus group sessions and the groups were held in Thailand on 23rd and 28th August 2011. The justification for conducting the focus group was elaborated in the previous chapter (see Section 4.5.2.3). The researcher recruited the participants by employing a "networking or snowball sampling" (Burton, 2000, p.314) via "original contacts" (Oates, 2000, p. 190) through the use of a screening questionnaire (see Appendix A-2.3). The moderator used the interview guide as an outline for interviewing the participants (see Appendix A-

1). This interview guide were developed on the basis of an extensive literature review on post-purchase evaluation and repurchase intention, including a screening question form for the participants to accept the interview and answer the questions put to the group. The interview guide in connection with both research objectives and questions were drafted in English and then translated into Thai (see Appendix A-3).

The research participants whose profiles are presented in Table 5.1 were classified by gender and age range. The number of respondents per group was eight persons (Stewart and Shamdasani, 1990; McNeill and Chapman, 2005). All participants were qualified for representativeness of the group interview. They have consumed dietary supplements during the past twelve months and have not been a patient or undergoing treatment.

Table 5.1 Profile of the participants Group 1 (G1) and Group 2 (G2)

Characteristics	Group 1	Group 2	Total
Gender			
Male	4	4	8
Female	4	4	8
Age range			
18 - 30 years old	2	2	4
31 - 40 years old	2	2	4
41 - 50 years old	2	2	4
> 50 years old	2	2	4
Education			
Bachelor's degree	4	6	10
Master's degree	4	2	6
Occupation			
Company employee	1	2	3
Government employee	5	2	7
Housewife	1	2	3
Self-employed/Business owner	1	2	3
Family income per month			
< 15,000 Baht	1	1	2
15,000-30,000 Baht	2	1	3
30,000-45,000 Baht	2	2	4
45,000-60,000 Baht	1	1	2
60,000-75,000 Baht	-	1	1
75,000-90,000 Baht	1	1	2
≥90,000 Baht	1	-	1
Type of dietary supplements			
Vitamins	3	4	7
Minerals	2	2	4
Herbs or other botanicals	3	2	5
Place for buying dietary supplements			
Drugstore	5	5	10
Drug section within department store, supermarket, or super store	1	1	2
Convenience store (e.g. 7-11, Family Mart)	1	-	1
Direct sale (e.g. Amway, Herbalife)	1	1	2
Online	-	1	1

Source: Researcher's fieldwork

In this research, the results were classified by age and gender. The researcher combined the participants from Group1 (G1) and Group 2 (G2) and then divided them into two further groups: (1) younger participants, aged 18-40 years old and (2) older participants aged 40 or over. The study needs to compare the age range and gender of participants to determine whether difference in age and gender has

an effect on the factors of post-purchase evaluation and repurchase intention. The results were beneficial for the quantitative method as the researcher can develop the questionnaire and theoretical frameworks from this study.

The research results were classified by the interview guide and subsequently summarised in order to answer each question as follows:

Definition of dietary supplements: Most research participants defined dietary supplements similarly. They understood that a dietary supplement is not food, but nutrients extracted from plants. Eight of the research participants defined dietary supplements as offering some nutrients that they may not receive from normal food intake. Moreover, the opinions from two younger male participants and one older female participant were somewhat similar, as follows:

> to keep healthy and bring in additional nutrients apart from the normal food intake.

The details are shown in Appendix A-4.4.1

Rationale for consuming dietary supplements: Some participants gave more than one reason. The reason given with the highest frequency was to replace and fill any nutrient deficiency in the body from two of the younger research male and female participants and one older research male participant. Three of the female participants were concerned about brands and prices. It is notable that younger participants seemed to consume dietary supplements for different reasons from

those provided by other participants as they aimed to be healthy and slow down the ageing process. Four younger male and female participants said that:

> I need to slow the ageing process of eye and face skin.

Meanwhile, three of younger members focused on promotional campaigns and advertisements. The details are shown in Appendix A-4.4.2.

Who recommended you taking dietary supplements: There were five male participants and four female participants who have chosen to consume dietary supplements because of their friends' recommendations. Some of them added that they had been advised by doctors. Interestingly, the two youngest participants revealed that their purchase decision was made on the basis of family members' recommendations and commercials and said that "the advertising of the products is very interesting". Also, the younger participants have chosen to consume the dietary supplements based on their own research and said that: "I always search for the information on the Internet" as shown in Appendix A-4.4.3.

Choosing an appropriate dietary supplement: The main reasons for participants to choose an appropriate dietary supplement were found to be similar. Most research participants largely considered the health benefits of such products in terms of solving nutritional deficiencies or the perceived failings in their immune system. A trustworthy brand and a reasonable price were also considered. Only two youngest participants included a factor of appropriate timing, as shown in Appendix A-4.4.3.

> when I have an examination, I always take dietary supplements more than a normal time.

Source of dietary supplements before purchasing: The most popular source for the participants in term of information on dietary supplements was the internet, friends, and salespersons respectively. Moreover, they gave the reason that they can compare the products before purchasing. The details are shown in Appendix A-4.4.4.

Brand of dietary supplements: As Appendix A-4.4.4 shows the popular dietary supplement brands most research participants have consumed were as follows: Blackmore, Brands; and Amway. Some participants gave the same key reasons for choosing these brands, as follows:

> "I trust in the brand" (two oldest participant females, two younger participant females); "This brand is safety" (two younger participant males); and "I want to boost the body functions" (two oldest participant females).

Place to purchase dietary supplements: Most participants purchased their dietary supplement products at a drugstore. Some of them bought the products with direct salesperson, at Boots shops, department stores and sometimes via the internet as illustrated in Appendix A-4.4.5.

Expectations after taking dietary supplements: Most research participants cited their expected outcomes as follows: to keep healthy; and to prevent fatal diseases such as cancer (see Appendix A-4.4.5). Moreover, the intended outcomes of consuming dietary supplement products included a better health condition and an ability to prevent illness/disease in the long term. On top of that, their selected dietary supplement products must be safe, efficient as advertised and worth the money. For example, older female participants said that:

> after taking dietary supplements, I get a better health; I can save my money on medical costs.

How do you know that the products work? : Most participants said that their current dietary supplement products were efficient. As addressed in Appendix A-4.4.6, this evaluation was largely based on their own observation: a comparison between consuming and not consuming (for a while). They felt healthy with dietary supplement products as compared to how they felt when not consuming any. Furthermore, they noticed that when they feel tired, they feel refreshed after consuming dietary supplement products.

Some participants did further research on how to consume; for example, the best time/period to consume the products for the maximum results such as examination time or eventful days or weeks. If they consume the products within this timing, they can keep fit and refreshed. They also noticed if their body show signs of deficiencies and examine the detailed ingredients and extracts so that their body deficiencies can be filled.

Reasons for satisfaction with products: All participants were very satisfied with their current dietary supplement products, giving a range of reasons: expected outcomes being met; revitalizing their physical tiredness; brand trust; buying convenience; reasonable price; and enhancing their body functions. The details are as shown in Appendix A-4.4.7.

Repurchase intentions: Repurchase intention results of dietary supplements in Appendix A-4.4.8 shows that all participants have continued buying the same brands/products for the next 6 months to one year, giving the following reasons: they have consumed the products for a while; the product can boost their body functions; they are familiar with the products; and they trust the brands. Most of them added that if there is a new product or brand, they will try it.

> I need to try a new product, if the quality is better than the old one may be I will change to the new one.

It is noteworthy that older participants refused to try an unknown product that may have some risk involved. The older participants gave the answer that: "I am not sure in the quality of a new product".

The results from the current study's two focus group sessions showed that most of the participants repurchased dietary supplements because they trust brands and products (see Appendix A-4.4.8). According to the data, they evaluated the product by noticing signs in themselves, for example, when they were tired, they

felt refreshed after consuming dietary supplement products. Therefore, there is no evidence to confirm that their health became better because of consuming dietary supplements. In this case, the participants' trust in ingredient information might make them feel better. This situation is consistent with Hahn (2004) who suggested that it is hard to find a credence product, even though consumers have tried, consumed or purchased it. The credence attributes often have an effect on consumer's decision. Consumers may trust credence attributes even though they cannot evaluate such attributes by their use of products (Darby and Karni, 1973).

Furthermore, results from the focus groups revealed that trust in brand and trust in product were silent reasons for consuming dietary supplements. These factors are important for the study itself as well as the whole literature. Thus this should be added to the questionnaire development for the pilot study. The study has classified the theoretical framework into two consumer perspectives: product and brand. Consumers' product perspective contains trust, expectation, satisfaction, and repurchase intention while consumers' brand perspective includes brand experience, brand trust, expectation, satisfaction, and repurchase intention. The study also contributed to the development of the questionnaire from the pilot study in order to gain more information about credence products from dietary supplements users. It was useful to test the questionnaire before conducting an actual survey. The detail of how the questionnaire items were modified by focus group can be found in the previous chapter (see Section 4.5.2.3). The results of pilot study are discussed in the next section.

5.3 Pilot study findings

A pilot study was conducted to test the reliability of scale items in the survey instrument by surveying dietary supplements users in Thailand. This pilot study was conducted with 50 respondents over fifteen days between 16th-30th June 2012. All interview sessions were conducted face-to-face in Bangkok, the capital city of Thailand. The researcher recruited the respondents via a screening questionnaire (see Appendix A-5.2.1). Criteria for respondents included a wide age range from 18 to more than 65 years old. All respondents have consumed dietary supplements during the past 12 months. The respondents were not patients nor were they undergoing treatment.

The data was analysed by SPSS 19.0 version and presented the results into four main parts as follows.

5.3.1 Demographic characteristics of the respondents

The demographic characteristics of the respondents in Table 5.2 explained that the respondents consisted of men (40%) and women (60%). As for the respondents' age, there were 6 groups: 18-25 years olds (12%); 26-35 years old (16%); 36-45 years old (22%), 46-55 years olds (20%); 56-65 years olds (18%); and more than 65 years old (12%). In terms of the respondents' occupations, these were categorized as follows: student (2%); company employee (40%); government employee (8%); housewife (14%), self-employed/business owner/freelance

(26%); and retired (10%). The respondents' marital status were single (48%); married (44%); widowed (6%), and divorced (2%). The educational levels of respondents were college/technical school/vocational school or equivalent (12%); bachelor's degree (64%); and master's degree (24%). With respect to family income per month, the respondents included those with less than 20,000 baht (2%); 20,001-40,000 baht (22%); 40,001-60,000 baht (18%); 60,001-80,000 baht (16%); 80,001-100,000 baht (24%); and 100,001 baht or above (18%).

Table 5.2 Demographic characteristics of pilot respondents

Items	Characteristics	Frequency	Percentage
Gender	Male	20	40.0
	Female	30	60.0
Age	18-25 years old	6	12.0
	26-35 years old	8	16.0
	36-45 years old	11	22.0
	46-55 years old	10	20.0
	56-65 years old	9	18.0
	More than 65 years old	6	12.0
Occupation	Student	1	2.0
	Company employee	20	40.0
	Government employee	4	8.0
	Housewife	7	14.0
	Self-employed/Business owner/Freelance	13	26.0
	Retired	5	10.0
Marital status	Single	24	48.0
	Married	22	44.0
	Widowed	3	6.0
	Divorced	1	2.0
Education level	College/technical school/vocational school or equivalent	6	12.0
	Bachelor's degree	32	64.0
	Master's degree	12	24.0
Family income per month	Less than 20,000 Baht	1	2.0
	20,001-40,000 Baht	11	22.0
	40,001-60,000 Baht	9	18.0
	60,001-80,000 Baht	8	16.0
	80,001-100,000 Baht	12	24.0
	100,001 Baht or above	9	18.0

Source: Researcher's fieldwork

5.3.2 Personal factors

This section describes personal factors related to the consumption of dietary supplements as indicated in Table 5.3. The respondents who consume dietary supplements twice a day were the largest group (42%); the second largest was those that take supplements three times per day (28%); the third was once per day (22%); and the last was four times per day (8%). The respondents who have consumed supplements after meals were the highest percentage (42%); before meals (30%); uncertain or cannot specify the time (18%); and before going to bed (10%). The respondents who have consumed supplements every day was the highest percentage (56%), followed by those taking supplements two or three days per week were of similar percentage (14% each), those taking supplements three days per week (12%) and those taking supplements five days per week were at the lowest rate (4%).

With respect to the frequency of purchasing dietary supplements, 3-4 times per year was at the most common (24%), followed by 5-6 times per year (22%), 7-8 times per year (20%), 1-2 times per year (16%), 9-10 times per year (10%), 11-12 times per year (6%), and more than 12 times per year (2%), respectively. As for the money spent on dietary supplements per time, 501-1,000 baht (30%) was highest percentage, followed by 1,001-2,000 baht (22%); 2,001-3000 baht (16%), more than 5,000 baht and 2,001-3,000 baht were similar percentage (12%), less than 500 baht (6%) and 4,001-5,000 baht (2%). In terms of type of dietary supplements, the respondents can specify as many as applicable. As a result, those consuming vitamins were rated the highest (62%), followed by those consuming

minerals (40%) and those taking herbs or other botanicals (34%). The highest-ranked brands they have consumed were Blackmore (42%), Amway (26%), Brand (14%); and other brands combined (18%).

Table 5.3 Personal factors of pilot respondents

Items	Characteristics	Frequency	Percentage
Consuming dietary supplements per day	Once	11	22.0
	Twice	21	42.0
	Three times	14	28.0
	Four times	4	8.0
Time for consuming	Before meals	15	30.0
	After meals	21	42.0
	Before going to bed	5	10.0
	Uncertain/cannot specify the time	9	18.0
Consuming frequency	Everyday	28	56.0
	1 day/week	-	-
	2 days/week	7	14.0
	3 days/week	7	14.0
	4 days/week	6	12.0
	5 days/week	2	4.0
	6 days/week	-	-
Purchasing frequency	1-2 times/year	8	16.0
	3-4 times/year	12	24.0
	5-6 times/year	11	22.0
	7-8 times/year	10	20.0
	9-10 times/year	5	10.0
	11-12 times/year	3	6.0
	More than 12 times/year	1	2.0
Cost spent on products per month	Less than 500 Baht	3	6.0
	501-1,000 Baht	15	30.0
	1,001-2,000 Baht	11	22.0
	2,001-3,000 Baht	6	12.0
	3,001-4,000 Baht	8	16.0
	4,001-5,000 Baht	1	2.0
	More than 5,000 Baht	6	12.0
Type of dietary supplements	Vitamins	31	62.0
	Minerals	20	40.0
	Herb or other botanicals	17	34.0
Brand name of dietary supplements	Blackmore	21	42.0
	Amway	13	26.0
	Brand	7	14.0
	Other brands combined	9	18.0

Source: Researcher's fieldwork

5.3.3 Descriptive statistics and reliability tests

Table 5.4 shows the results of standard deviation values, mean values, and Cronbach's alpha. The respondents respond to items on a seven-point Likert-type scale response anchors, where 7=strongly agree, 6=moderately agree, 5=slightly agree, 4=agree, 3=neutral, 2=slightly disagree, and 1=strongly disagree.

5.3.3.1 Descriptive statistics

Descriptive statistics provide a simple summary: mean and standard deviation values (SD). Mean values describe the central tendency while a standard deviation values explain the data distribution of this study. Table 5.4 shows the variables of mean values and SD values. All variables of mean values were between 5 and 6.5 degrees, indicating the respondents' tendency towards slightly agreeing and moderately agreeing with statements. As for the SD, the values were between 0.6 and 1.0, that is, close to the average (1), showing a data dispersion. This means that the respondents had a variety of opinions on factors of post-purchase evaluations and repurchase intentions. In this case, the study needs to further explore with more respondents.

Table 5.4 Variable measurement items, mean, SD, and reliability test of pilot respondents

Variables	Number of subscale items	Mean	SD	Cronbach's alpha
Important reasons for consuming dietary supplements.	19	5.08	0.62	0.768
Consumers' product perspective				
Trust	14	5.06	0.77	0.940
Expectations	5	5.50	0.86	0.879
Satisfaction	6	5.63	0.85	0.918
Repurchase intention	8	6.30	0.83	0.870
Consumers' brand perspective				
Brand experience	12	5.55	0.71	0.933
Brand trust	8	5.40	0.94	0.948
Expectations	5	5.50	0.83	0.893
Satisfaction	6	6.46	1.04	0.936
Repurchase intention	8	5.74	0.79	0.920

Source: Researcher's fieldwork

5.3.3.2 Reliability test

In terms of the reliability test, Cronbach's coefficient alpha method was used in this study. A Cronbach's coefficient of at least 0.80 was acceptable and the testing value cut-off at 0.70 is also suitable (Kline, 2005) for this study. In some cases, values of 0.6 or 0.7 may be acceptable (Easterby-Smith *et al.*, 2008; Hair *et al.*, 2010). In addition, as seen in the table of contents in Appendices A-8.1-8.3, most values for Corrected Item-Total Correlation of each subscale item were also greater than 0.30, meaning the overall items were well correlated (Field, 2009).

In this part, reliability analyses were summarised into three sections: section 1 was to test the important reasons for consuming dietary supplements; section 2 was to test the items consumers' product perspective; and section 3 was to test consumers' brand perspective. There were ten sections of the variables for

reliability analyses: section 1 was the important reasons for consuming dietary supplements composed of 19 subscale items; section 2 included trust, expectations, satisfaction, and repurchase intentions, in which 14, 5, 6 and 8 subscale items were contained respectively. Section 3 was composed of brand experience, brand trust, expectations, satisfaction, and repurchase intentions, in which 12, 8, 5, 6 and 8 in the subscale items respectively.

(1) Important reasons for consuming dietary supplements

The first section was nineteen subscale items used to measure of the important reasons for consuming dietary supplements where the alpha values was 0.768, meaning reliable. However, Corrected Item-Total Correlation of five subscale items of important reasons for consuming dietary supplements were less than 0.3 and thus not correlated. The items were "you saw an advertisement and it convinced you to buy" "product is inexpensive"; "medical advice"; "friends' advice"; and "family members' advice". In this case, the researcher needed to revise or delete these items. In the second test, after deleting such items, the results showed that three items (product is inexpensive, medical advice and family members' advice) were correlated with the overall items with an average overall alpha value increase from 0.768 to 0.796, meaning these values were acceptable. Meanwhile, two items (you saw an advertisement and it convinced you to buy and family members' advice) were not correlated with an average overall alpha value of 0.768, leading the researcher to reconsider these items before continuing to

conduct the study. The Cronbach's alpha of each subscale items of the rationale for consuming dietary supplements is shown in Appendix A-8.1.

(2) Consumers' product perspectives

The second section was a four scale general items measurement. The Cronbach's alpha showed that trust was measured at 0.940, expectations at 0.879, satisfaction at 0.918, and repurchase intentions at 0.870. In this section, there were variables of general item measurements with reliability. In this section, values of Corrected Item-Total Correlation of each subscale item were also greater than 0.30. This means that the overall items are well correlated. Moreover, the Cronbach's alpha of each subscale items of trust, expectations, satisfaction, and repurchase intentions are shown in Appendices A-8.2.1-8.2.4

(3) Consumers' brand perspective

The third section aimed to test the scale items by brand and thus was divided into five parts: brand experience, brand trust, expectations, satisfaction, and repurchase intentions. The Cronbach's alpha value of brand experience was 0.933, that of brand trust 0.948; that of expectations 0.893; that of satisfaction 0.936; and that of repurchase intentions 0.920. This means that all had good reliability. In this section, values of Corrected Item-Total Correlation of each subscale item were also greater than 0.30. This means that the overall items were well correlated.

Furthermore, the Cronbach's alpha of each subscale item is shown in Appendices A-8.3.1-8.3.5.

5.3.4 Exploratory factor analysis (EFA)

This study used exploratory factor analysis (EFA) to develop question scale items (Field, 2009). Principal component analysis (PCA) was conducted on three sections with extraction factors and the method of orthogonal rotation (varimax) (Field, 2009). According to our fifty samples, the values shown in Appendix A-7 showed the significant level of 0.75 (Hair *et al*., 2010; Field, 2009)

The Kaiser-Meyer-Olkin (KMO) measures the sampling appropriateness for the factor analysis (Kaiser, 1970 cited in Field, 2009). The KMO values and the anti-image correlation matrix indicate the overall KMO values and the individual variables. A KMO values of than 0.5 is not acceptable; between 0.5 and 0.7 is mediocre; between 0.7 and 0.8 is good; between 0.8 and 0.9 is great; and more than 0.9 is superb (Hutcheson and Sofroniou, 1999, cited in Field, 2009, p. 647). In this part, the summary of EFA was classified into three sections as shown in Table 5.5.

Table 5.5 Summary of exploratory factor analysis (EFA) of pilot respondents

Variables	Number of subscale items	KMO	KMO values for individual	Df	Bartlett's test of Sphericity (X^2)	Initial Eigenvalues (>1)	Cumulative (%)	Communalities
Important reasons for consuming dietary supplements	19	0.673	3 items < 0.5, 16 items > 0.5	171	400.966, p<0.001	7	76.09	0.761
Consumers' product perspective								
Trust	14	0.862	2 items between 0.7 and 0.8 11 items between 0.8 and 0.9 1 item >0.9	91	573.523. p<0.001	3	76.27	0.763
Expectation	5	0.805	4 items between 0.7 and 0.8 1 item between 0.8 and 0.9	10	136.105, p<0.001	1	68.12	0.681
Satisfaction	6	0.813	All between 0.7 and 0.8	15	225.526, p<0.001	1	71.50	0.715
Repurchase intention	8	0.852	6 items between 0.8 and 0.9 2 items between 0.7 and 0.8	28	204.058, p<0.001	2	68.43	0.681
Consumers' brand perspective								
Brand experience	12	0.864	2 items between 0.7 and 0.8 6 items between 0.8 and 0.9 4 items >0.9	66	409.108, p<0.001	2	67.76	0.678
Brand trust	8	0.914	3 items between 0.8 and 0.9 5 items >0.9	28	357.703, p<0.001	1	74.28	0.743
Expectation	5	0.835	All between 0.8 and 0.9	10	138.858, p<0.001	1	70.15	0.701
Satisfaction	6	0.907	2 items between 0.8 and 0.9 4 items >0.9	15	242.453, p<0.001	1	75.85	0.759
Repurchase intention	8	0.880	5 items between 0.8 and 0.9 3 items >0.9	28	288.650, p<0.001	1	65.37	0.654

Source: Researcher's fieldwork

Table 5.5 illustrates the summary of KMO values. There were three section variables of a pilot study for EFA testing. The first section contained nineteen items of the important reasons for consuming dietary supplements. The results showed that the Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis, meaning KMO=0.67 was mediocre. In this case, sixteen of the KMO values for individual items were between 0.5 and 0.8, meaning that the values were mediocre and good, respectively. There were three KMO values for individual items (product is inexpensive, medical advice and family members' advice) which were < 0.5, which was less than the acceptable limit of 0.5 (Field, 2009). Moreover, with the Bartlett's test of sphericity χ^2 (171) = 400.966, p<0.001, seven components had Eigen values over Kaiser's criterion of 1 and in combination explained 76.09% of the variance.

In terms of consumers' product perspective, the KMO values of trust, expectations, satisfaction, and repurchase intentions were between 0.8 and 0.9, meaning that they were great. All the KMO values for individual items above 0.7 also were acceptable. For trust values of Bartlett's test of sphericity χ^2 (91) = 573.523. p<0.001, three components had Eigen values over Kaiser's criterion of 1 and in combination explained 76.27% of the variance.

For expectations values of Bartlett's test of sphericity χ^2 (10) = 136.105, p<0.001, only one component had Eigen values over Kaiser's criterion of 1 and in combination explained 68.12% of the variance. For satisfaction values of Bartlett's test of sphericity X^2 (15) 225.526=, p<0.001, only one component had

Eigen values over Kaiser's criterion of 1 and in combination explained 71.50% of the variance.

Finally, for repurchase intentions values of Bartlett's test of sphericity χ^2 (28) =204.058 p<0.001, two components had Eigen values over Kaiser's criterion of 1 and in combination explained 68.43% of the variance.

In case of consumers' brand perspective, the KMO values of brand experience, expectations, and repurchase intentions were between 0.8 and 0.9, and therefore were all great. Meanwhile, the KMO values of brand trust and satisfaction at more than 0.9 were superb. All the KMO values for individual items above 0.7 also were acceptable.

For brand experience values of Bartlett's test of sphericity χ^2 (66) 409.108=, p<0.001, two components had Eigen values over Kaiser's criterion of 1 and in combination explained 67.76% of the variance. For brand trust values of Bartlett's test of sphericity X^2 (28) 357.703=, p<0.001, two components had Eigenvalues over Kaiser's criterion of 1 and in combination explained 74.28% of the variance.

For expectations values of Bartlett's test of sphericity χ^2 (10) 138.858=, p<0.001, one component had Eigen values over Kaiser's criterion of 1 and in combination explained 70.15% of the variance. For satisfaction values of Bartlett's test of sphericity χ^2 (15) 242.453=, p<0.001, one component had Eigen values over Kaiser's criterion of 1 and in combination explained 75.85% of the variance.

For repurchase intentions values of Bartlett's test of sphericity X^2 (28) 288.650=, $p<0.001$, one component had Eigenvalues over Kaiser's criterion of 1 and in combination explained 65.37% of the variance. Furthermore, all average values of communalities were more than 0.6, indicating the adequacy of the sample size, which is less than 100 samples (Field, 2009).

Table 5.6 Total variance of pilot respondents

Variables	Components	Extraction Sum of Squares loadings			Rotated Sum of Squares loadings		
		Total	% of variance	Cumulative	Total	% of variance	Cumulative
Important reasons for consuming dietary supplements	1	4.924	25.914	25.914	3.131	16.479	16.479
	2	2.222	11.695	37.609	2.604	13.687	30.166
	3	2.118	11.150	48.759	2.050	10.790	40.956
	4	1.582	8.326	57.086	1.983	10.439	51.394
	5	1.334	7.022	64.108	1.764	9.282	60.676
	6	1.275	6.713	70.820	1.551	8.163	68.840
	7	1.001	5.266	76.087	1.377	7.247	76.087
Consumers' product perspective							
Trust	1	7.970	56.927	56.927	5.120	36.572	36.572
	2	1.694	12.098	69.024	2.795	19.963	56.535
	3	1.014	7.244	76.268	2.763	19.734	76.268
Expectation	1	3.406	68.118	68.118	-	-	-
Satisfaction	1	4.290	71.504	71.504	-	-	-
Repurchase intention	1	4.410	55.122	55.122	3.571	44.640	44.640
	2	1.065	13.310	68.431	1.903	23.791	68.431
Consumers' brand perspective							
Brand experience	1	6.959	57.994	57.994	4.479	37.327	37.327
	2	1.172	9.763	67.757	3.652	30.430	67.757
Brand trust	1	5.943	74.282	74.282	-	-	-
Expectation	1	3.507	70.149	70.149	-	-	-
Satisfaction	1	4.551	75.850	75.850	-	-	-
Repurchase intention	1	5.230	65.371	65.371	-	-	-

Source: Researcher's fieldwork

The results in Table 5.6 show the factors of the study, which classified by Kaiser's criterion with Eigen values of greater than 1 with the method varimax. Important reasons for consuming dietary supplements contained nineteen linear components within the data set. After extraction and rotation by SPSS, there were seven variables with the Eigenvalues of higher than 1 in terms of the percentage variance explained. Factor 1 to 7 explained 25.914%, 11.695%, 11.150%, 8.326%, 7.022%, 6.713%, and 5.266% of the total variance, respectively. This result showed that subsequent factors can explain the amounts of variance smaller than the previous one after extraction. For example, for factor 1, the percentage of variance before extraction was 25.914% (see Extraction Sum of Squares loadings**),** then the extracted value declined to 16.479% (see Rotated Sum of Squares loadings). Moreover, factor 1 was more significant than other variables.

Regarding consumers' product perspective, the Eigenvalues were more than 1, which left three variables of trust. The first factor of percentage of variance was significantly than others, the percentages were (56.927%, 12.098%, and 7.244% respectively). Meanwhile, the repurchase intentions had two variables, factor 1 of which was also more significant than the second (55.122% vs. 13.310%). Expectations and satisfaction had only one component, explained by 68.118% and 71.504% of the amounts of variance and there was significance for the sample size.

Regarding consumers' brand perspective, there were Eigenvalues of more than 1, which left two variables of brand experience. The results showed that subsequent factors between factor 1 and factor 2 were 57.994% vs. 9.763%, yet the previous

difference between values of 20.667% was equal after extraction. Therefore, factor 1 was not as significant as factor 2. At the same time, other variables (brand trust, expectation, satisfaction, and repurchase intentions) had only one component and were explained by 74.282%, 70.149%, 75.850%, and 65.371%, respectively of the amount of variance and there was significance for the sample size.

In conclusion, a sample size of fifty for a pilot study was deemed suitable for the factor analysis at the significant level of 0.75, as evidenced in the above statistics. All variables in the pilot study questionnaire remained unchanged and the variables of consumers' product and brand perspectives were also accurate.

5.4 Chapter summary

This chapter is divided into two main parts: focus group and pilot study. The results from the focus groups provided the study with more information to develop the questionnaire and classify the conceptual models. Trust in brands and trust in products of dietary supplements have become crucial issues for the study to focus on. Moreover, the study has classified the theoretical framework into two consumer perspectives: products and brands, based on the results of the group interview. The age range of the respondents was changed from four ranges to six ranges. However, the main questionnaire content has been developed from the literature review as well as some results from the discussion group as addressed in the questionnaire development section in Chapter 4.

The pilot study was collected with 50 respondents in Bangkok, Thailand, and the data was analysed by SPSS 19.0 version. Descriptive statistics provide a simple summary: mean and standard deviation values (SD). The reliability test of each subscale item showed that they were reliable. All variables in the pilot study questionnaire remained unchanged after reporting the validity by EFA. Every average value of communalities indicated the adequacy of the sample size. However, three KMO values have emerged as key reasons for consuming dietary supplements for individual items (product is inexpensive, medical advice and family members' advice) because their values were < 0.5, meaning that they were below the acceptable limit of 0.5 (Field, 2009). This indicated that the sample size was inappropriate for the actual study. The researcher thus considered increasing the number of respondents and classifying the respondents as shown in Chapter 4.

The following chapter reports the findings of main study with respect to the conceptual models.

Chapter 6

Findings of the main study

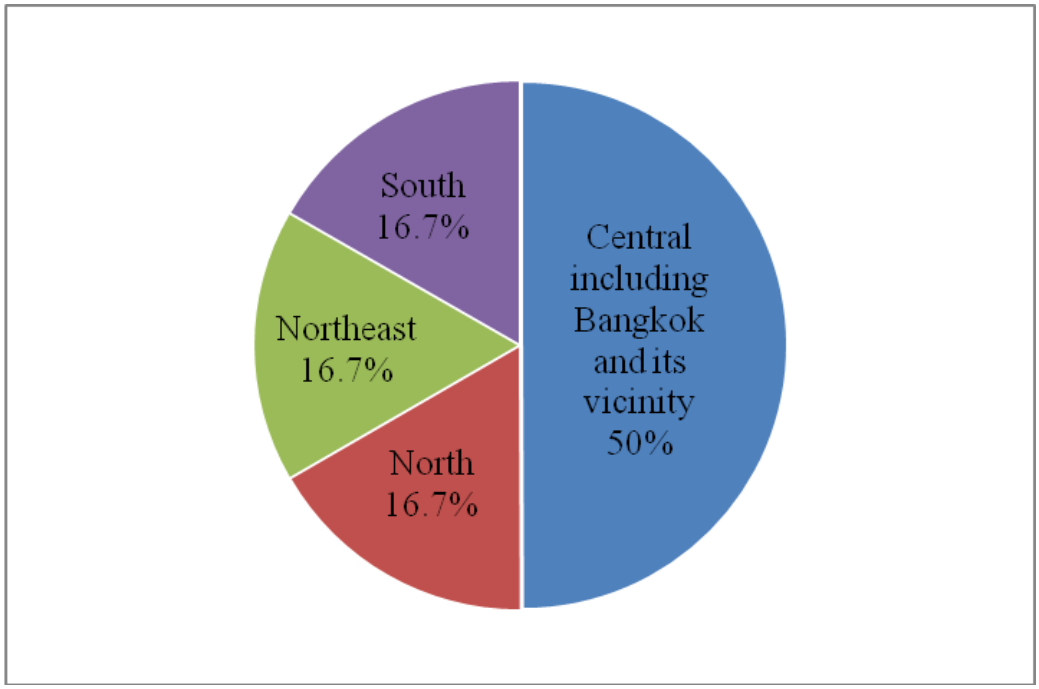
6.1 Introduction

This chapter reports the data analysis and the findings of the main study. Section 6.2 presents data examination. Section 6.3 addresses exploratory data analysis and descriptive statistics, which explain the response rate and demographic characteristics of the respondents, frequency of distribution and the centrality of tendencies, reliability and validity tests, as well as exploratory factor analysis (EFA). Section 6.4 presents hypotheses testing by structure equation modelling (SEM) and regression analysis. Finally, a chapter summary is presented in section 6.5.

6.2 Data examination

This study was conducted in four regions of Thailand: north, north-east, central including Bangkok and its vicinity, and the south of Thailand. The top three provinces in each region of the highest expenditure per household were chosen based on the data from the National Statistic Organisation (NSO), Thailand. The

information was obtained from 504 respondents in twelve provinces (16.7%) of the total 76 provinces. Figure 6.1 break downs the percentage of the respondents from each of the four regions of Thailand. It highlights that central including Bangkok and its vicinity was the highest of this study with 252 respondents (50.0%) whereas the other three regions (north, northeast, and south) were equal with the proportion of 84 respondents in each region (16.7%).



Source: Researcher's fieldwork

Figure 6.1 Percentage of the respondents by regional

The fieldwork was completed in three months and fifteen days from 16th July to 30th October 2012. All interviews were conducted face-to-face by eight trained interviewers with the use of screening questions in order to ensure that respondents were suitable. The researcher and interviewers did not interview at all

if the respondents did not fit the sample characteristics. For this reason, the survey of this study had no missing data. This study used SPSS 19.0 and AMOS software version 19.0 to analyse data.

6.2.1 Response rate

Table 6.1 shows the success rate in each region of finding suitable valid respondents. The number of respondents in terms of gender and age range had to be revised during the survey. Firstly, it was decided that there should be an equal gender split of a sample of 252 per gender. The study divided age into six age ranges, and then divided respondents into six equal groups of 84 samples per range.

Table 6.1 Summary of the successful rate of valid respondents (region) (n=504)

Regions	Provinces	Respondents	Percentage	Valid respondents	Percentage
Central	Bangkok	180	35.7	180	35.7
	Nonthaburi	36	7.1	36	7.1
	Chonburi	36	7.1	36	7.1
North	Lumphun	12	2.4	12	2.4
	Chiang Mai	48	9.5	48	9.5
	Kumphaengphet	24	4.8	24	4.8
Northeast	Udon Thani	48	9.5	48	9.5
	Nong Bua Lam Phu	24	4.8	24	4.8
	Mukdahan	12	2.4	12	2.4
South	Phuket	12	2.4	12	2.4
	Surat Thani	36	7.1	36	7.1
	Songkhla	36	7.1	36	7.1
Total		**504**	**100.0**	**504**	**100.0**

Source: Researcher's fieldwork

However, during the data collection, the researcher and team confronted the following problems:

(1) Some elderly respondents had not consumed the products during for the whole 12 months. They had tried the products, but did not continue consuming the products for more than 12 months. Moreover, some respondents also said that they had consumed the dietary supplements to relieve a disease, which disqualified them from this study's criteria.

(2) Some sample respondents declined to be interviewed because they said that it took a long time to answer the questionnaire, which took about twenty-five minutes.

In an attempt to solve these problems, the researcher revised the sample size with respect to gender and age range in order to better suit the situation. Finally, after collecting data, the total sample size in terms of gender and age range is displayed in Tables 6.2 and 6.3 respectively.

Table 6.2 Summary of the successful rate of valid respondents (gender) (n=504)

Gender	Respondents	Percentage	Valid respondents	Percentage
Male	252	50.0	240	47.6
Female	252	50.0	264	52.4
Total	**504**	**100.0**	**504**	**100.0**

Source: Researcher's fieldwork

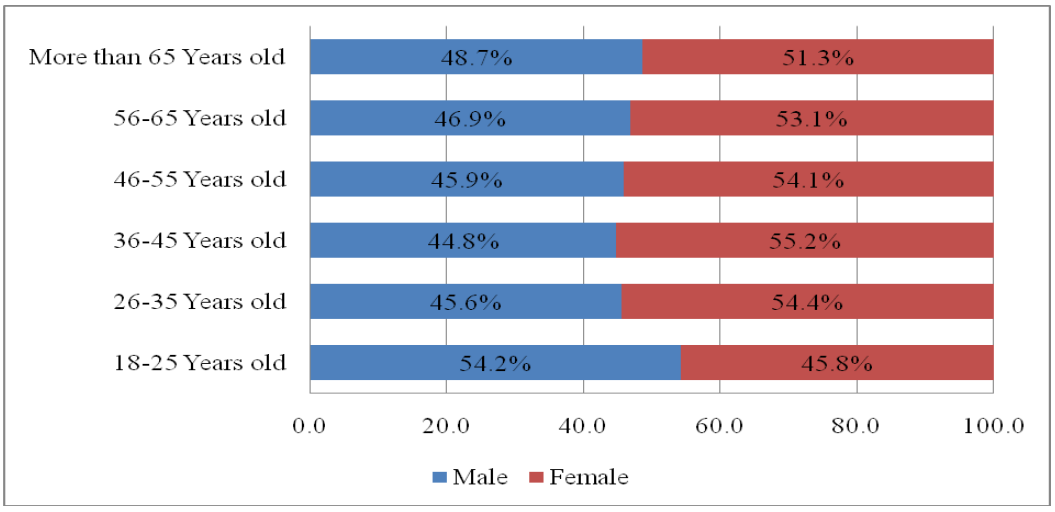
Table 6.3 Summary of the successful rate of valid respondents (age range) (n=504)

Age range	Respondents	Percentage	Valid respondents	Percentage
18-25 years	84	16.6	83	16.5
26-35 years	84	16.6	90	17.9
36-45 years	84	16.6	87	17.3
46-55 years	84	16.6	85	16.9
56-65 years	84	16.6	81	16.1
65 years above	84	16.6	78	15.5
Total	**504**	**100.0**	**504**	**100.0**

Source: Researcher's fieldwork

As can be seen, the sample did not achieve the balance of gender and age range as previously planned. However, the final sample was achieved with no significant impact on the data analysis and the number of each group was similar to that previously planned.

Figure 6.2 summarises the valid respondents across age range and gender. Nearly every age range, the female number of was higher than the male; only the age range 18-25 years old of the male group was higher than the female (54.2% and 45.8% respectively).



Source: Researcher's fieldwork

Figure 6.2 Percentage of the respondents by age and gender

6.3 Exploratory data analysis

The data analysis begins with descriptive statistics, reliability tests, and validity tests and exploratory factor analysis (EFA), which was conducted and classified on two main consumer perspectives: product and brand.

6.3.1 Descriptive statistics

This section explains demographic data, personal factors, and data distributions.

6.3.1.1 Demographic characteristics of the respondents

The demographic characteristics of the respondents that were deemed relevant were gender, age range, occupation, marital status, education level, income and important reasons for consuming dietary supplements.

The respondents consisted of males (47.6%) and females (52.4%). As for the respondents' age, there were six age groups: first, 18-25 years old (16.5%); second, 26-35 years old (17.9%); third, 36-45 years old (17.3%); fourth, 46-55 years old (16.9%); fifth, 56-65 years olds (16.1%); and sixth, above 65 years old (15.5%). In terms of the respondents' occupation, they were categorized as follows: student (7.3%); company employee (39.9%); government employee (15.5%); housewife (6.5%), self-employed/business owner/freelance (21.4%) retired (8.9%); and other (0.4%). It was noticeable that the comparison of

respondents' occupation between urban and rural areas in Thailand showed a difference. The highest percentage of urban respondents was company employees (5.35%), while that of the rural respondents was self-employed/business owner/freelance (28.6%).

The respondents' marital status was single (39.1%); married (51.6%); widowed (6.9%); and divorced (2.4%). The educational levels of respondents were college/technical school/vocational school or equivalent (28.2%) and also bachelor's degree which was of the highest percentage (60.9%). This indicated that both respondents from urban and rural areas gained a bachelor degree (63.9% and 53.9% respectively) at least with some of master's degree (10.9%). With respect to family income per month, the respondents included those with less than 20,000 baht (15.1%); 20,001-40,000 baht (31.5%); 40,001-60,000 baht (25.6%); 60,001-80,000 baht (10.3%); 80,001-100,000 baht (10.3%); and 100,001 baht or above (7.1%). Results showed that most of the average monthly income per family of the respondents in the urban and rural areas was in the range of 20,001-60,000 baht (see Table 6.4).

Table 6.4 Demographic data with regional comparisons (n=504)

Characteristics	Urban (N=252)		Rural (N=252)		Total (N=504)	
	Freq.	%	Freq.	%	Freq.	%
Gender						
Male	121	48.0	119	47.2	240	47.6
Female	131	52.0	133	52.8	264	52.4
Age range						
18-25 years	41	16.3	42	16.7	83	16.5
26-35 years	42	16.7	48	19.0	90	17.9
36-45 years	44	17.5	43	17.1	87	17.3
46-55 years	43	17.1	42	16.7	85	16.9
56-65 years	41	16.3	40	15.9	81	16.1
above 65 years	41	16.3	37	14.7	78	15.5
Occupation						
Student	18	7.1	19	7.5	37	7.3
Company employee	135	53.6	66	26.2	201	39.9
Government employee	33	13.1	45	17.9	78	15.5
Housewife	12	4.8	21	8.3	33	6.5
Self-employed/Business owner/Freelance	36	14.3	72	28.6	108	21.4
Retired	18	7.1	27	10.7	45	8.9
Others (Farmers)	0	0.0	2	0.8	2	0.4
Marital status						
Single	106	42.1	91	36.1	197	39.1
Married	122	48.4	138	54.8	260	51.6
Widowed	18	7.1	17	6.7	35	6.9
Divorced	6	2.4	6	2.4	12	2.4
Education						
College	66	26.2	76	30.2	142	28.2
Bachelor degree	161	63.9	146	57.9	307	60.9
Master degree	25	9.9	30	11.9	55	10.9
Income						
Less than 20,000 Baht	48	19.0	28	11.1	76	15.1
20,001-40,000 Baht	85	33.7	74	29.4	159	31.5
40,001-60,000 Baht	59	23.4	70	27.8	129	25.6
60,001-80,000 Baht	26	10.3	26	10.3	52	10.3
80,001-100,000 Baht	17	6.7	35	13.9	52	10.3
Above 100,000 Baht	17	6.7	19	7.5	36	7.1

Source: Researcher's fieldwork

6.3.1.2 Personal factors

This section describes personal factors in relation to the consumption of dietary supplements as indicated in Table 6.5. The respondents have consumed dietary supplements 1 time per day was of the highest rank (54.8%); the second was 2 times per day (33.7%); the third was 3 times per day (9.1%) and the last was 4

times per day (2.4%). The respondents who have consumed supplements after meals was of the highest percentage (35.3%); before going to bed (29.0%); before meals (21.2%); and uncertain or cannot specify the time (14.5%). The respondents who have consumed supplements every day was of the highest percentage (63.9%), followed by those taking 1 day per week (10.5%); 3 times per week (7.5%); 2 days per week (7.1%); 5 days per week (4.0%) while those taking 4 days per week (3.8%) with those taking 6 days per week at the lowest rate (3.2%).

With respect to the frequency of purchasing dietary supplements, 3-4 times per year was of at the highest rate (28.0%), followed by 5-6 times per year (20.8%), 1-2 times per year (17.5%), 11-12 times per year (14.1%), 7-8 times per year (8.5%), 9-10 times per year (7.5%), and more than 12 times per year (3.6%). As for the money spent on dietary supplements per time, 501-1,000 baht (30.4%) was highest percentage, followed by 1,001-2,000 baht (25.2%), less than 500 baht (22.6%), 2,001-3000 baht (8.3%), 3,001-4,000 baht (6.3%). Finally, those purchasing in the range of 4,001-5,000 baht and those spending more than 5,000 baht were of a similar percentage (3.6%).

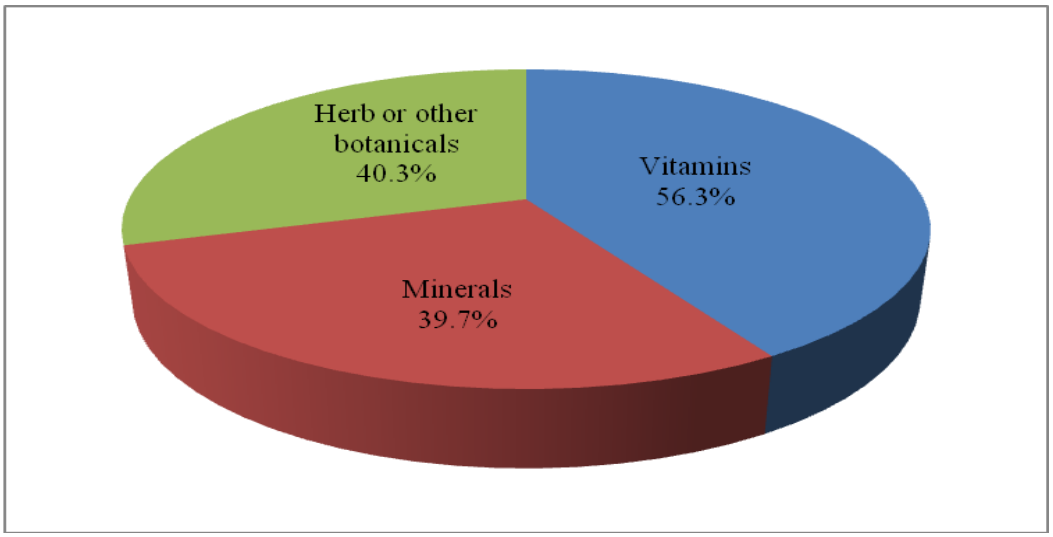
Table 6.5 Personal factors in consumption of dietary supplements by region and gender (n=504)

Characteristics	Region				Gender				Total	
	Urban (N=252)		Rural (N=252)		Male (N=240)		Female (N=264)		(N=504)	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Consuming dietary supplements per day										
Once	134	53.2	142	56.3	129	53.8	147	55.7	276	54.8
Twice	84	33.3	86	34.1	82	34.2	88	33.3	170	33.7
Three times	24	9.5	22	8.7	21	8.8	25	9.5	46	9.1
Four times	10	4.0	2	0.8	8	3.3	4	1.5	12	2.4
Time for consuming										
Before meals	57	22.6	50	19.8	39	16.3	68	25.8	107	21.2
After meals	87	34.5	91	36.1	85	35.4	93	35.2	178	35.3
Before going to bed	68	27.0	78	31.0	64	26.7	82	31.1	146	29.0
Uncertain/cannot specify the time	40	15.9	33	13.1	52	21.7	21	8.0	73	14.5
Consuming frequency										
Everyday	137	54.4	185	73.4	141	58.8	181	68.6	322	63.9
1 day/week	27	10.7	26	10.3	34	14.2	19	7.2	53	10.5
2 days/week	20	7.9	16	6.3	11	4.6	25	9.5	36	7.1
3 days/week	29	11.5	9	3.6	22	9.2	16	6.1	38	7.5
4 days/week	15	6.0	4	1.6	16	6.7	3	1.1	19	3.8
5 days/week	15	6.0	5	2.0	9	3.8	11	4.2	20	4.0
6 days/week	9	3.6	7	2.8	7	2.9	9	3.4	16	3.2
Purchasing frequency										
1-2 times/year	57	22.6	31	12.3	45	18.8	43	16.3	88	17.5
3-4 times/year	89	35.3	52	20.6	63	26.3	78	29.5	141	28.0
5-6 times/year	42	16.7	63	25.0	46	19.2	59	22.3	105	20.8
7-8 times/year	19	7.5	24	9.5	21	8.8	22	8.3	43	8.5
9-10 times/year	15	6.0	23	9.1	22	9.2	16	6.1	38	7.5
11-12 times/year	24	9.5	47	18.7	35	14.6	36	13.6	71	14.1
More than 12 times/year	6	2.4	12	4.8	8	3.3	10	3.8	18	3.6
Cost spent on products per month										
Less than 500 Baht	55	21.8	59	23.4	54	22.5	60	22.7	114	22.6
501-1,000 Baht	84	33.3	69	27.4	67	27.9	86	32.6	153	30.4
1,001-2,000 Baht	53	21.0	74	29.4	63	26.3	64	24.2	127	25.2
2,001-3,000 Baht	20	7.9	22	8.7	23	9.6	19	7.2	42	8.3
3,001-4,000 Baht	22	8.7	10	4.0	15	6.3	17	6.4	32	6.3
4,001-5,000 Baht	12	4.8	6	2.4	10	4.2	8	3.0	18	3.6
More than 5,000 Baht	6	2.4	12	4.8	8	3.3	10	3.8	18	3.6
Type of dietary supplements*										
Vitamins	169	67.1	115	45.6	132	55.0	152	57.6	284	56.3
Minerals	102	40.5	98	38.9	96	40.0	104	39.4	200	39.7
Herb or other botanicals	85	33.7	118	46.8	89	37.1	114	43.2	203	40.3
Brand name of dietary supplements										
Blackmore	73	29.0	53	21.0	68	28.3	58	22.0	126	25.0
Amway	51	20.2	45	17.9	37	15.4	59	22.3	96	19.0
Brand	64	25.4	54	21.4	70	29.2	48	18.2	118	23.4
Other brands combined	64	25.4	100	39.7	65	27.1	99	37.5	164	32.6

Source: Researcher's fieldwork

*Note: the respondents can specify more than one answer.

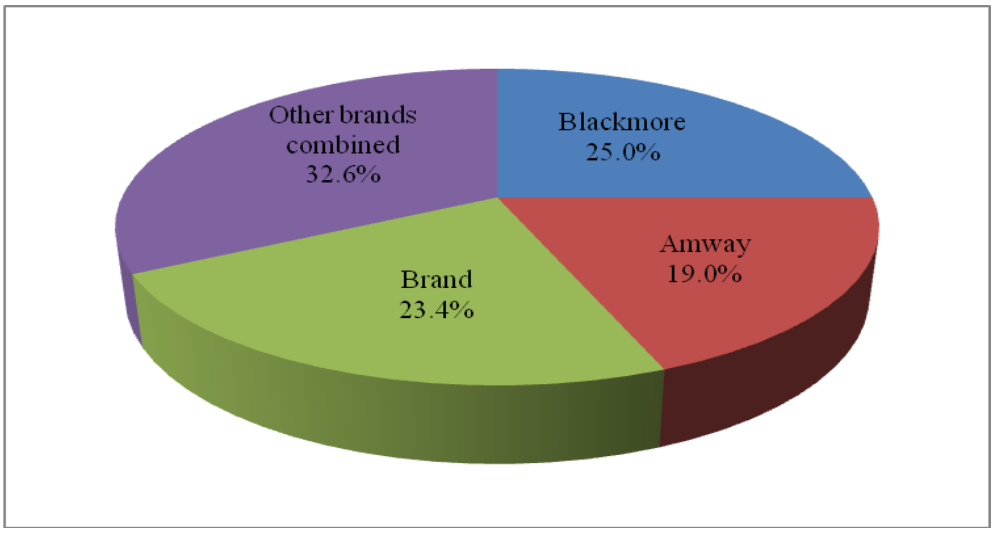
In terms of type of dietary supplements, the respondents could specify as many as applicable. As a result, those consuming vitamins were rated the highest (56.3%), followed by those consuming herbs or other botanicals (40.3%), and those taking minerals (39.7%) (see Figure 6.3).



Source: Researcher's fieldwork
*Note: the respondents could specify more than one answer.

Figure 6.3 Type of dietary supplements

As can be seen in Table 6.5, the rural respondent has consumed herbs or other botanicals more than urbans' respondent (46.8%, 33.7%, respctively). Moreover, females also consumed herbs or other botanicals more than males (43.2% and 37.1% respectively). Moreover, the highest-ranked brands the respondents have consumed were Blackmore (25.0%), Brand (23.4%), Amway (19.0%), and other brands combined (32.6%) (see Figure 6.4).



Source: Researcher's fieldwork

Figure 6.4 Highest-ranked brands of dietary supplements

6.3.1.3 Important reasons for consuming dietary supplements

This section explains the important reasons for consuming dietary supplements as presented in Table 6.6, ranging from highest to lowest mean. There were twenty measurement items for this construct, in which nineteen items were closed questions and one item was an open-ended question. All items employed seven-point Likert scales with a score of 7 indicating "extremely important"; and a score of 1 indicating "not at all important". The top five highest ranked mean values were to keep healthy (5.85); this brand is safe (5.74); expected outcomes were met when respondents took them last time (5.59); to replace any nutrient deficiency (5.58); and trust the brand (5.56) respectively. However, there were sixteen respondents who specified the open-end question at twenty rankings. Therefore, mean values of this item were calculated by dividing the total number of respondents who had specified the answers (16 respondents).

It was noteworthy that, in almost every case, the mean values of important reasons for consuming dietary supplements, which classified by region, the values from the rural respondents were higher than the urban respondents, especially for the resons of "keep healthy" (6.08) and "this brand is safe" (6.08). This was similar to the highest-ranked means (grouped by gender), means from females were higher than males (5.88 and 5.82 respectively). Likewise, in this case; the number of females (n=264) were higher than that of males (n=240).

Table 6.6 Ranking of means of important reasons for consuming dietary supplements by region and gender (n=504)

Rank	Items	Mean				Overall
		Region		Gender		
		Urban	Rural	Male	Female	
		(N=252)	(N=252)	(N=240)	(N=264)	(N=504)
1	To keep healthy.	5.62	6.08	5.82	5.88	5.85
2	This brand is safe.	5.40	6.08	5.70	5.78	5.74
3	Expected outcomes were met when you took them last time.	5.33	5.84	5.56	5.61	5.59
4	To replace any nutrient deficiency.	5.45	5.72	5.57	5.59	5.58
5	You trust the brand.	5.23	5.88	5.55	5.56	5.56
6	To reduce and prevent any risk of illness/disease.	5.31	5.79	5.58	5.53	5.55
7	To enhance the immune system.	5.35	5.72	5.56	5.51	5.53
8	You can rely on the brand.	5.19	5.83	5.55	5.48	5.51
9	To revitalize physical tiredness.	5.33	5.54	5.50	5.37	5.43
10	To slow the aging process.	5.12	5.33	5.20	5.24	5.22
11	You have consumed them for a while.	4.90	5.50	5.26	5.15	5.20
12	To maintain life longevity.	4.92	5.17	5.12	4.98	5.05
13	You saw an advertisement and it convinced you to buy.	4.67	5.29	5.11	4.86	4.98
14	To ease the excretory system.	4.98	4.91	5.02	4.88	4.95
15	Product is inexpensive.	4.87	4.93	4.87	4.93	4.90
16	To reduce medical costs.	4.60	5.11	5.05	4.67	4.85
17	Family members' advice.	4.28	4.73	4.58	4.44	4.51
18	Friends' advice.	4.24	4.66	4.38	4.52	4.45
19	Medical advice.	4.00	4.22	4.03	4.19	4.11
20	* Other (would like to try)	6.00	4.15	4.20	5.00	4.50

Source: Researcher's fieldwork

*Note: Mean values were calculated by dividing the total number of respondents who had given each answer (16 respondents)

6.3.2 Data distributions

This study used univariate normality to evaluate the normal distributions, which is explained by examining the skewness and kurtosis of the data (Kunnan, 1998; Kline, 2005, Field, 2009). Table 6.7 illustrates frequencies of measurement variables of this study.

From the consumers' product perspective of measurement variables, the minimum values ranged from 1.80 to 7.00. Standard deviation (SD) value indicates that the mean value is related to the suitability of sample data and measures the average score and the central tendency (Field, 2009). In this research, mean values were between 5.34 and 5.57and all SD values were close to average 1, meaning low data dispersion. Skewness values ranged from -0.276 to -0.585, and kurtosis values -0.359 to 0.365.

For the consumers' brand perspective, the minimum values ranged from 1.00 to 7.00 and mean values were between 5.27 and 5.55; and all SD values were also close to average 1, meaning that there was data dispersion. Skewness values were between -0.215 and -0.572 with a negative skew; and kurtosis values ranged from 0.795 to -0.376.

Therefore, the distribution from both two perspectives deviated from normal, but all measurement values of skewness and kurtosis were still between -3 and +3 (Kline, 2005). Kunnan (1998) also indicated that both values are not more than ±2.

As a result, the data of this study was a normal distribution (see Appendices B-1.1 and 1.2) and is thus acceptable for further analysis.

Table 6.7 Frequency of measurement variables of this study (n=504)

Measurement variables	Number of items	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
Consumers' product perspective							
Trust	14	3.07	7.00	5.57	0.812	-0.347	-0.271
Expectation	5	1.80	7.00	5.34	0.896	-0.585	0.365
Satisfaction	6	2.33	7.00	5.44	0.880	-0.276	-0.168
Repurchase intention	8	2.75	7.00	5.54	0.838	-0.387	-0.359
Consumers' brand perspective							
Brand experience	12	2.33	7.00	5.36	0.858	-0.567	0.392
Brand trust	8	2.50	7.00	5.27	0.879	-0.215	-0.376
Expectation	5	1.40	7.00	5.35	0.888	-0.572	0.795
Satisfaction	6	1.00	7.00	5.44	0.945	-0.511	0.743
Repurchase intention	8	2.63	7.00	5.55	0.833	-0.402	0.052

Source: Researcher's fieldwork

As for the means of P-PE factors by regional and gender in Table 6.8, all means of P-PE factors from the rural respondents were higher than that of the urban respondents from both consumers' product perspective and consumers' brand perspective. In terms of gender, means of trust, expectation, and repurchase intention from the female consumers' product perspective was higher than that of male, even though the number of the female respondents (n=264) were higher than that of the male (n=240).

Table 6.8 Means of P-PE factors by region and gender

Variables	Mean				Overall
	Region		Gender		
	Urban	Rural	Male	Female	
	(N=252)	(N=252)	(N=240)	(N=264)	(N=504)
Consumers' product perspective					
Trust	5.38	5.76	5.56	5.58	5.57
Expectation	5.08	5.60	5.32	5.35	5.34
Satisfaction	5.15	5.72	5.44	5.44	5.44
Repurchase intention	5.31	5.76	5.54	5.55	5.54
Consumers' brand perspective					
Brand experience	5.13	5.58	5.39	5.33	5.36
Brand trust	5.00	5.54	5.29	5.24	5.27
Expectation	5.06	5.64	5.36	5.35	5.35
Satisfaction	5.15	5.72	5.44	5.44	5.44
Repurchase intention	5.30	5.79	5.56	5.55	5.55

Source: Researcher's fieldwork

6.3.3 Reliability test

A summary of Cronbach's alpha values for the entire scale of both perspectives is presented in Table 6.9.

The Cronbach's alpha of the consumers' product perspective showed that trust was measured at 0.935, expectations at 0.913, satisfaction at 0.922, and repurchase intentions at 0.914. In this section, there were variables of this perspective item measurements with reliability considered as excellent (Kline, 2005). In this section, values of Corrected Item-Total Correlation for each subscale item were also greater than 0.30. This means that the overall items are well correlated. The Cronbach's alpha of each subscale items of these measurements are shown in Appendices B-2.1.1-2.1.4.

This section was to test the scale items by consumer's brand perspective and divided into five parts: brand experience, brand trust, expectations, satisfaction,

and repurchase intentions. The Cronbach's alpha value of brand experience was 0.945; that of brand trust was 0.928; that of expectations was 0.914; that of satisfaction was 0.945; and that of repurchase intentions was 0.915. This means that all were excellent reliability. In this section, values of Corrected Item-Total Correlation of each subscale item were also greater than 0.30. This means that the overall items were well correlated. The Cronbach's alpha of each subscale items of these measurements are shown in Appendices B-2.2.1-2.2.5.

Table 6.9 Summary of reliability test (Cronbach's alpha)

Measurement variables	Number of items	Cronbach's alpha
Consumers' product perspective		
Trust	14	0.935
Expectation	5	0.913
Satisfaction	6	0.922
Repurchase intention	8	0.914
Consumers' brand perspective		
Brand experience	12	0.945
Brand trust	8	0.928
Expectation	5	0.914
Satisfaction	6	0.945
Repurchase intention	8	0.915

Source: Researcher's fieldwork

6.3.4 Validity test

The study used exploratory factor analysis (EFA) to evaluate the construct validity, which focused on the total variance.

6.3.4.1 Exploratory factor analysis (EFA)

The values shown in Table 6.10 show the significant level of 0.30 (Hair et al., 2010; Field, 2009). The summary of EFA testing is shown in Table 6.10.

(1) Consumers' product perspective

The consumer product perspective contained fourteen items measuring trust; five items measuring expectation; six items measuring satisfaction; and eight items measuring repurchase intention. The results showed that the Kaiser-Meyer-Olkin (KMO) measure verified the sampling adequacy for the analysis. The KMO values of trust, expectations, satisfaction, and repurchase intentions were between 0.8 and 0.9, and more than 0.9 meaning great and superb respectively. All the KMO values for individual items above 0.8 also were acceptable.

For trust values of Bartlett's test of sphericity $\chi 2$ (91) = 5010.962, $p<0.001$, three components had Eigen values over Kaiser's criterion of 1 and in combination explained 71.18% of the variance. For expectations values of Bartlett's test of sphericity $\chi 2$ (10) = 1694.364, $p<0.001$, only one component had an Eigen value over Kaiser's criterion of 1 and in combination explained 74.44% of the variance. For satisfaction values of Bartlett's test of sphericity $\chi 2$ (15) =2400.659, $p<0.001$, only one component had an Eigen value over Kaiser's criterion of 1 and in combination explained 72.76% of the variance. Finally, for repurchase intentions values of Bartlett's test of sphericity $\chi 2$ (28) =2441.902, $p<0.001$, two

components had Eigen values over Kaiser's criterion of 1 and in combination explained 63.49% of the variance.

(2) Consumers' brand perspective

In terms of the consumer brand perspective, the KMO values of brand experience, brand trust, expectations, satisfaction, and repurchase intentions were more than 0.9, meaning superb. The results showed that the KMO measure verified the sampling adequacy for the analysis.

The values of Bartlett's test of sphericity $\chi2(66)= 4676.009, p<0.001$, two components had Eigen values over Kaiser's criterion of 1 and in combination explained 71.59% of the variance. For brand trust, values of Bartlett's test of sphericity $\chi2\ (28) =2764.006$, $p<0.001$, two components had Eigen values over Kaiser's criterion of 1 and in combination explained 67.14% of the variance. For expectations values of Bartlett's test of sphericity $\chi2\ (10) =1655.576$, $p<0.001$, one component had an Eigen value over Kaiser's criterion of 1 and in combination explained 74.52% of the variance. For satisfaction values of Bartlett's test of sphericity $\chi2\ (15)\ 2822.522=$, $p<0.001$, one component had an Eigen value over Kaiser's criterion of 1 and in combination explained 78.54% of the variance. Finally, repurchase intentions values of Bartlett's test of sphericity $\chi2\ (28)\ 2510.591=$, $p<0.001$, one component had an Eigen value over Kaiser's criterion of 1 and in combination explained 64.02% of the variance. Furthermore, all average values of communalities were more than 0.6, indicating the adequacy of the sample size, which was more than 250 samples (Field, 2009).

Table 6.10 Summary of exploratory factor analysis (EFA)

Variables	Number of subscale items	KMO	KMO values for individual	Df	Bartlett's test of sphericity (χ^2)	Initial Eigen values (>1)	Cumulative (%)	Communalities
Consumers' product perspective								
Trust	14	0.908	5 items between 0.8 and 0.9 9 items >0.9	91	5010.962, p<0.001	3	71.18	0.712
Expectations	5	0.881	4 items between 0.8 and 0.9 1 item >0.9	10	1694.364, p<0.001	1	74.44	0.744
Satisfaction	6	0.896	3 items between 0.8 and 0.9 3 items >0.9	15	2400.659, p<0.001	1	72.76	0.728
Repurchase intention	8	0.929	All items more than 0.9	28	2441.902, p<0.001	2	63.49	0.635
Consumers' brand perspective								
Brand experience	12	0.944	All items more than 0.9	66	4676.009, p<0.001	2	71.59	0.716
Brand trust	8	0.933	All items more than 0.9	28	2764.006, p<0.001	1	67.14	0.671
Expectations	5	0.895	2 items between 0.8 and 0.9 3 items >0.9	10	1655.576, p<0.001	1	74.52	0.745
Satisfaction	6	0.913	2 items between 0.8 and 0.9 4 items >0.9	15	2822.522, p<0.001	1	78.54	0.785
Repurchase intention	8	0.926	1 items between 0.8 and 0.9 7 items >0.9	28	2510.591, p<0.001	1	64.02	0.640

Source: Researcher's fieldwork

6.3.4.2 Total variance explained

Table 6.11 shows Eigen values results, which were related to the components before and after extraction, and after rotation. The study used Kaiser's criterion to report accurately the latent variables of each factor (Field, 2009). Two perspectives of this study are explained next.

(1) Consumers' product perspective

The consumer product perspective generated three variables of trust. The first factor was significantly higher than the others and the percentage were (54.525%, 8.728%, and 7.929%). However, after the extraction it remained only 25.475% of variance (compared to 24.880% and 20.828% respectively). Expectations, satisfaction, and repurchase intention had only one component, explained by 74.437%, 72.761%, and 63.496% of the amounts of variance, which was significant for the sample size.

(2) Consumers' brand perspective

From the consumer brand perspective, there were Eigen values of more than 1, which generated two variables of this experience. The result showed that subsequent factors between factor 1 and factor 2 were 64.425% vs. 9.168%; however, after extraction it remaining only 38.594% and 33.000% of variance. At the same time, other variables (brand trust, expectation, satisfaction, and

repurchase intentions) had only one component and were explained by 67.136%, 74.522%, 78.544%, and 64.016%, respectively, of the amount of variance, which was significant for the sample size.

In sum, this supports that both the extraction factors for the latent variables of both perspectives were accurate. This was based on the sample size of more than 250 samples, the number of each variable being less than 30 and the average communality larger than 0.6 (Field, 2009).

Table 6.11 Explanation of total variance

Variables	Components	Extraction Sum of Squares loadings			Rotated Sum of Squares loadings		
		Total	% of variance	Cumulative	Total	% of variance	Cumulative
Consumers' product perspective							
Trust	1	7.634	54.525	54.525	3.567	25.475	25.475
	2	1.222	8.728	63.253	3.483	24.880	50.355
	3	1.110	7.929	71.183	2.916	20.828	71.183
Expectations	1	3.722	74.437	74.437	-	-	-
Satisfaction	1	4.366	72.761	72.761	-	-	-
Repurchase intention	1	5.080	63.496	63.496	-	-	-
Consumers' brand perspective							
Brand experience	1	7.491	62.425	62.425	4.631	38.594	38.594
	2	1.100	9.168	71.594	3.960	33.000	71.594
Brand trust	1	5.371	67.136	67.136	-	-	-
Expectations	1	3.726	74.522	74.522	-	-	-
Satisfaction	1	4.713	78.544	78.544	-	-	-
Repurchase intention	1	5.121	64.016	64.016	-	-	-

Source: Researcher's fieldwork

6.4 Hypothesis testing

The hypotheses testing of this study is reported by structural equation modelling (SEM) and regression analysis, which are addressed in the following section.

6.4.1 Hypotheses testing by structural equation modelling (SEM)

The main objective of SEM statistics is to test the relationship of multiple equations and also to measure whether or not the model fits or anticipates the other statistics; and which is appropriate for SEM. Researchers need to accept or decline the whole model, after any specific relationship is verified and the results of testing the model fit are acceptable. However, if the observed covariance matrix and estimated covariance matrix are consistent, it means that the model is appropriate (Hair *et al*., 2010). SEM provides a conceptual way to verify theory (Hair *et al*., 2010). Therefore, this research followed the six-stage process of SEM as shown in Table 6.12.

Table 6.12 Six stages process for structural equation modelling used in this research

Stage number	SEM process	Chapter
1	Defining the individual constructs	Chapter 3, section 3.2 Chapter 4, section 4.5.3
2	Developing the overall measurement model	Chapter 3, section 3.5 Chapter 5
3	Designing a study to produce empirical results	Chapter 6, table 6.13
4	Assessing the measurement model validity	Chapter 6, section 6.4.1.1
5	Specifying the structural model	Chapter 6, section 6.4.1.2
6	Assessing structural model validity	Chapter 6, section 6.4.1.3

Adapted from Hair *et al*. (2010)

For the process of SEM, the relationship model identified by P-PE of this study has been classified into two consumer perspectives: product; and brand. The study has defined the individual constructs in Chapter 3 with all constructs shown in Chapter 4. Then, the pilot study in Chapter 5 tested the reliability and validity, and also screened the items for appropriateness by EFA (Hair *et al*., 2010). The measurement model was developed from the literature review in Chapter 3 and included two focus groups in Chapter 5. The researcher also provided SEM notation and a symbol list for indicators, constructs, and relationship between variables used in this study in Table 6.13. The next section explains the measurement model of P-PE of credence products of consumers' product perspective and consumers' brand perspective. Most constructs were based on seven-point Likert-type scaled data and used the maximum likelihood (ML) method.

Table 6.13 Variables, SEM notation and symbol list used in this study

Perspective	Exogenous variables	Variable number	Symbol	SEM notation	Endogenous variables	Variable number	Symbol	SEM notation
Consumers' product perspective	Trust	14	TP	TP1- TP14	Expectation	5	EP	EP1- EP5
	Expectation	5	EP	EP1- EP5	Satisfaction	6	SP	SP1-SP6
	Satisfaction	6	SP	SP1-SP6	Repurchase intention	1	RP	RP8
Consumers' brand perspective	Brand Experience	12	BEB	BEB1- BEB12	Expectation	5	EB	EB1-EB5
	Brand trust	8	BTB	BTB1-BTB8	Satisfaction	6	SB	SB1-SB6
	Expectation	5	EB	EB1-EB5	Repurchase intention	1	RB	RB8
	Satisfaction	6	SB	SB1-SB6				

Adapted from Hair *et al*. (2010) and researcher's fieldwork

6.4.1.1 Accessing the measurement model validity: confirmation factor analysis (CFA)

(1) Consumers' product perspective

The exogenous variables or hypothesized constructs of the consumers' product perspective consist of three constructs: trust, expectation, and satisfaction. The endogenous variable is the repurchase intention.

(1.1) Model summary

The CFA model was a recursive type. With 504 respondents, there were 54 regression weights, 29 of which were fixed while 25 were estimated. Further, there were 3 covariances and 29 variances, all of which were estimated. In total, there were 86 parameters with 57 parameters to be estimated. The model had 351 sample moments with the degree of freedom of 294 (351-57), observed variables of 26 based on the formula $p(p+1)/2$, 26(27)/2. The model yielded the chi-square of 2118.735 and probability level value was 0.000 (see Appendix B-3.1.1).

(1.2) Parameter estimated

The statistical test of the parameter estimated was critical ratio, which depended on a p value of less than 0.05 and the statistical test was >±1.96 (>±1.96, $p<0.05$). All parameter estimated values of this study ranged between 0.064 and 0.890. Therefore, the values indicate that all estimates were suitable and significant for

the P-PE for repurchase intentions of credence products from the consumer product perspective. Furthermore, all standard error values were in good order (Byrne, 2001) (see Appendix B-3.1.2).

(1.3) Explained variance and residual variances

The squared multiple correlations indicated the variance for the measurement variables (see Appendix B-3.1.3). The variance explained was between 0.422 (42.2%, TP1) and 0.792 (79.2%, SP6). The residual variances values of this model ranged from 20.8% to 60.0%, which was calculated by deducting each explained variance from one.

(1.4) Model assessment

After the researcher has specified the model, it is important to evaluate the model fit by Goodness-of-Fit (GOF). There are three basics of GOF: Absolute Fit index; Incremental Fit indices; and Parsimonious Fit Indices (Byrne, 2001; Schumacker and Lumax, 2004; Kline, 2005; Tabachnick and Fidell, 2007; Hair *et al*., 2010), suggesting that the model of study can repeat the observation of the covariance matrix between the indicator items. A number of assessment indices were used to assess the validity of the model fit. If the values indicated any value shown in Table 6.14, they were valid for the overall model fit (Hair *et al*., 2010).

Table 6.14 Possibility for selective reporting of goodness-of-fit indices

	Goodness-of-fit indices (GOF)		Interpretation a good model fit
Absolute Fit Indices	X^2	Minimum fit function Chi-square	p>0.05
	DF	Degree of freedom	$p \geq 0$
	X^2/df	Chi-square/ Degree of freedom ratio	2 to 5
	GFI	Goodness of fit index	≥0.90
	AGFI	Average goodness of fit index	≥0.90
	RMSEA	Root mean square error of approximation	≤0.08
Incremental Fit Indices	NFI	Normed fit index	>0.90
	CFI	Comparative fit index	≥0.95
Parsimonious Fit Indices	PGFI	Parsimony goodness of fit index	≥0.50
	PNFI	Parsimony normed fit index	≥0.50

Adapted from: Byrne (2001); Schumacker and Lumax (2004); Kline (2005); Tabachnick and Fidell (2007); Hair *et al*. (2010)

The possibility for selective value reporting of model fit indexes from the product perspective in the three groups of goodness-of-fit statistics are summarised in Table 6.15, taken from the AMOS output (see Appendix B-3.1.4).

(1.4.1) Absolute fit indices

For the absolute fit indices, the first fit values showed that the chi-square test was χ^2 (N=504, DF 294) = 2118.735, $p< 0.05$. However, the next values of this group were GFI=0.730, AGFI=0.677, and RMSEA=0.111. The fit values for improving GFI and AGFI in SEM model are quite similar (Kilne, 2005). A value greater than or equal to 0.90 can indicate a model fit (Tabachnick and Fidell, 2007). A value closer to 1 is the better fit index for GFI. In this study, GFI and AGFI were less than values for approximate model fit (>=0.90). The RMSEA value of over 0.08 was unacceptable as the model fit (Hu and Bentler, 1999). This meant that the goodness-of-fit for purpose tests did not fit the model well.

(1.4.2) Incremental fit indices

Incremental fit indices sometimes represent comparative fit ones. They can test the model fit, known as a null model in which the results show uncorrelated variables (Hair *et al*., 2010). These indexes are composed of normed fit index (NFI), and comparative fit index (CFI). NFI and CFI values of this study were 0.808 and 0.830 respectively. A value that is larger than 0.90 of NFI and 0.95 of CFI indicates a better fit model; values that are closer to 1 indicate a perfect fit model; and any values between 0 and 1 are approximate (Hair *et al*., 2010). A good-fitting model of CFI indicating a value of greater than 0.90 is frequently acceptable (Hu and Bentler, 1999). Nevertheless, the value 1.0 means the model is not fit (Kline, 2005). Therefore, NFI and CFI of this research did not fit the model well.

(1.4.3) Pasimonious fit indices

The third index is parsimonious fit index which measures a better fit. The parsimony ratio is associated with the degree of freedom, including parsimony normed fit index (PNFI) and parsimony goodness of fit index (PGFI) (Tabachnick and Fidell, 2007; Hair *et al*., 2010). PNFI adjusts the NFI. The higher values are related to a fit model and can also be evaluated in the same way as NFI (Hair et al., 2010). The value less than or equal to 0.5 is acceptable as a model fit (Kline, 2005). PGFI is derived from GFI. The greater the fit index is, the better the value closer to 1 is. However, this index will be significantly less than other indices

when the number of data points is larger than the number of parameters (Tabachnick and Fidell (2007). PGFI and PNFI values of this study were 0.611 and 0.731, which were greater than 0.50, indicating a good fit.

Table 6.15 Goodness-of-fit statistics from the consumer product perspective

Goodness-of-fit indices		Interpretation a good model fit	Original model	Modified Model
Absolute Fit Indices	χ^2	-	2118.735	1169.466
	P	p>0.05	0.000	0.000
	DF	≥0	294	263
	χ^2/df	2 to 5	7.207	4.447
	GFI	≥0.90	0.730	0.833
	AGFI	≥0.90	0.677	0.794
	RMSEA	≤0.08	0.111	0.083
Incremental Fit Indices	NFI	>0.90	0.808	0.886
	CFI	≥0.95	0.830	0.909
Parsimonious Fit Indices	PGFI	≥0.50	0.611	0.674
	PNFI	≥0.50	0.731	0.777

Sources: Researcher's fieldwork

(1.5) Modification indices (MIs)

Based on the original model of the consumers' product perspective, and on the CFA model, χ^2/df, RMSEA, GFI, AGFI, NFI, and CFI, the values shown in Table 6.15 did not fit well. Therefore, the study needs to modify the model by reviewing the MIs. Having reviewed the lists of MIs and regression weights (see Appendix B-3.1.5), four parameters in relation to cross-loadings, the highest regression weight value was (MI=10.175). This parameter referred to the cross-loading of expectation factors on TP1 and it might be more appropriate to increase the load on the expectation factor. In the meantime, the highest MIs in association with regression weight values were TP14 on TP13, and TP13 on TP14 (103.979; 91.355), respectively. These MIs did not refer to cross-loadings. Returning to the covariances, these showed evidence that the misspecification were related to

pairing items; e14 and e13 (MIs= 203.536), and e13 and e12 (MIs= 130.231). These two were greater than the remainder, and they signified mis-specified error covariance. These indicate that TP13 may be inappropriate for testing trust factors. As a result, the study considered modifying the model and deleting TP13. Consequently, all items of factors in this research were drawn from 25 items of the original 26 items (see Table 6.16). After re-modifying the model, some values of GOF model were still misfit, for instance, the GFI, AGFI values of 0.762 and 0.713, respectively.

Table 6.16 Finalised scale items model for consumers' product perspective

Constructs	Scales as in the questionnaire	Symbol
Trust	The quality of this product has been very consistent.	TP1
	The product has a good performance/quality.	TP2
	The production process of the product is trustworthy.	TP3
	The quality control process of the product is trustworthy.	TP4
	The firm of the product is trustworthy.	TP5
	The firm of the product keeps its promises made to customers.	TP6
	The firm of the product has a reputation for honesty.	TP7
	The firm of the product is renowned for attending to customers' needs and wants.	TP8
	The quality and safety of the safety are certified by third party organisations or governments.	TP9
	The product is certified by standard assurances.	TP10
	Nutritional benefits are trustworthy (e.g. boosting the immune system, filling a dietary imbalance).	TP11
	Nutrition information is trustworthy.	TP12
	Ingredient information is trustworthy.	**TP13***
	Side effect information is trustworthy.	TP14
Expectation	This product provides the dietary supplements level that you want to be offered.	EP1
	Your needs and wants are fulfilled by this product.	EP2
	This product provides benefits corresponding to its price.	EP3
	Your expectations are higher than before consuming this product.	EP4
	Overall, the products meet your current expectation.	EP5
Satisfaction	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	SP1
	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	SP2
	It is the correct decision to purchase this product.	SP3
	You are satisfied with information content this product.	SP4
	You are satisfied with the quality of this product.	SP5
	Overall, you are so satisfied with the product.	SP6
Repurchase intention	Overall, you intend to continue buying this product, rather than any alternative.	RP8

Note: *items deleted in the modified model

Therefore, the study turned to MIs (see Appendix B-3.2.1), the error covariance of misfit, which was larger than those remaining in e1 and e2 (116.177), e7 and e8 (MI=93.657), e6 and e7 (87.185), e3 and e4 (76.419), e5 and e6 (60.148), e12 and e14 (80.458), and e20 and e21 (42.410) Thus, the study needed to modify the model again.

A review of the fit indices revealed in Table 6.15 that the modified model, which was based on 25 items of P-PE factor, was better than the original one. Particularly, the overall fit values of χ^2/df = 4.006, GFI, AGFI, NFI and CFI was increased gradually to 0.833 (from 0.730), 0.794 (from 0.677), 0.886 (from 0.808), and 0.909 (from 0.830) respectively. These values had all improved, as does the reduction of RMSEA to 0.083 (from 0.111), as Byrne, (2001) and Schumacker and Lumax (2004) state that AGFI, GFI, NFI , and CFI values are acceptable, even they are less than the level of threshold, and with values close to 1.00 are indicative of good fit. Besides χ^2 between the original model and modified model, the comparison value was 949.269 (i.e.2118.735-1169.466), which yielded a difference in χ^2 of 949.269 and indicated the improvement of fit (see Appendix B-3.2.2). As a result, the researcher considered the modified model to represent the fit model of P-PE of credence products. The final modified model P-PE for repurchase intentions of credence products for the consumer product perspective is shown in Figure 6.5.

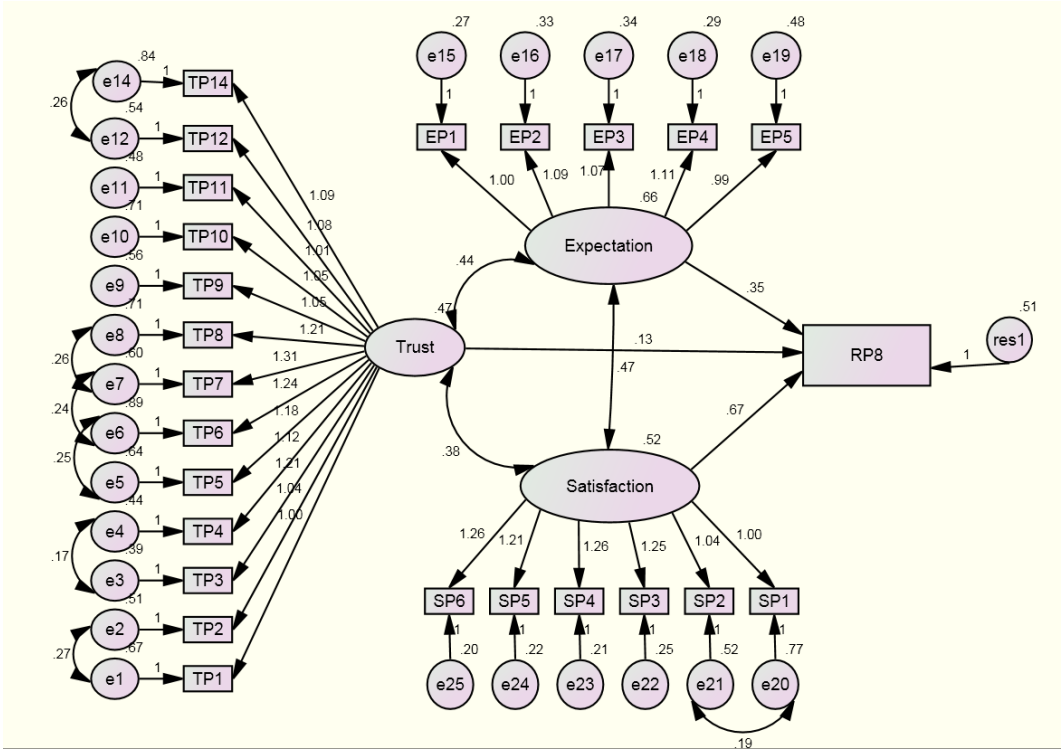


Figure 6.5 Measurement CFA model of P-PE for repurchase intention of credence products: consumers' product perspective (the modified model)

(2) Consumers' brand perspective

There are five constructs of brand perspective: the exogenous variables are brand experience, brand trust, while the endogenous variables are expectation, satisfaction, and repurchase intention.

(2.1) Model summary

The CFA model was a recursive type. There were 504 respondents in this study. There were 74 regression weights, 38 of which were fixed and 36 of which were

estimated, and there was 1 co-variance and 36 variances, all of which were estimated. In total, there were 111 parameters, and 73 parameters to be estimated. The model had 528 sample moments, degree of freedom was 455 (528-73), observed variables were 32, which was based on the formula $p(p+1)/2$, 32(33)/2. The model yielded the chi-square of 1994.387 and a probability level value was 0.000, it was less than 0.001 ($p<0.001$) (see Appendix B-3.3.1.).

(2.2) Parameter estimated

The statistical test of parameter estimates is critical ratio, which depends on a p value less than 0.05 and the statistic test was $>\pm1.96$ ($>\pm1.96$, $p<0.05$). All parameter estimated values of this study ranged between 0.030 and 0.921. Therefore, the values indicate that all estimates were suitable and significant for the P-PE for repurchase intentions of credence products of consumers' brand perspective. Furthermore, all standard error values were in good order (Byrne, 2001) (see Appendix B-3.3.2).

(2.3) Explained variance and residual variances

The squared multiple correlations indicate explained variance for the measurement variables (see Appendix B-3.3.3). The variance explained was between 0.500 (50.0%, BEB4) and 0.848 (84.8%, SB6). The residual variances values of this model range from 15.2% to 50.0% which was calculated by deducting each explained variances from one.

(2.4) Model assessment

The goodness-of-fit statistics are summarised in Table 6.17. All values were taken from the AMOS output (see Appendix B-3.3.4).

(2.4.1) Absolute fit indices

For the values absolute fit indices, the first fit values showed that the chi-square test was χ^2 (N=504, DF 455) = 1994.387, $p< 0.05$. However, the next values of this group, GFI=0.771, AGFI=0.735. This concluded that the goodness-of-fit tests of GFI and AGFI did not fit the model well, where RMSEA=0.082 indicated mediocre fit (MacCallum *et al*., 1996).

(2.4.2) Incremental fit indices

NFI and CFI values of this study were 0.870 and 0.896 respectively, the value larger than 0.90 indicates a better fit model. The value closer to 1 is a perfect fit model, and any values ranges between 0 and 1 are approximated. Therefore, the study was an inadequate fit to the data.

(2.4.3) Parsimonious fit indices

PGFI and PNFI values of the study were 0.665 and 0.798. These values were consistent with suggesting the model fit well.

Table 6.17 Goodness-of- fit statistics from the consumer brand perspective

Goodness-of-fit indices		Interpretation a good model fit	Original model	Modified model
Absolute Fit Indices	χ^2	-	1994.387	1272.993
	P	p>0.05	0.000	0.000
	DF	≥0	455	390
	χ^2/df	2 to 5	4.383	3.264
	GFI	≥0.90	0.771	0.852
	AGFI	≥0.90	0.735	0.824
	RMSEA	≤0.08	0.082	0.067
Incremental Fit Indices	NFI	>0.90	0.870	0.909
	CFI	≥0.95	0.896	0.935
Parsimonious Fit Indices	PGFI	≥0.50	0.665	0.715
	PNFI	≥0.50	0.798	0.815

Sources: Researcher's fieldwork

(2.5) Modification indices (MIs)

According to the original model of product perspective, this was based on a CFA model, RMSEA, GFI, AGFI, NFI, and CFI, values shown in Table 6.17 did not fit well. Therefore, the study needs to modify the model by reviewing the MIs. Having reviewed the lists of MIs and regression weights (see Appendix B-3.3.5), four parameters which relate to cross-loadings, the highest regression weights value was (MI=10.051). This parameter refers to the cross-loading of satisfaction factors on BEB11and may load more on the expectation factor. In the meantime, the highest MIs related to regression weight values were BEB4 on BEB3, BEB3 on BEB4 (55.309; 47.101) respectively. These MIs did not refer to cross-loadings. Returning to the co-variances, which showed evidence that the misspecification relates to pairing items; e4 and e3 (MIs= 115.700), and e12 and e11 (MIs= 77.300), these two are greater than those remaining, and they refer to mis-specified error covariance. These conclude that BEB11 and e3 may be inappropriate for testing brand experience factors, and so the study considered

modifying the model and deleting these two items. Consequently, all items of factors in this research are based on 30 items of the original 32 items (see Table 6.18). After re-modifying the model, there were some values of GOF model still misfit, for instance, the GFI, AGFI values of 0.806, 0.773, respectively.

Table 6.18 Finalised scale items model for consumers' brand perspective

Constructs	Scales as in the questionnaire	Symbol
Brand trust	This brand meets your expectations.	BTB1
	You feel confidence in this brand.	BTB2
	This brand never disappoints you.	BTB3
	This brand guarantees my satisfaction.	BTB4
	This is an honest and sincere brand	BTB5
	You could rely on this brand for problem-solving.	BTB6
	This brand would make any effort to make you be satisfied.	BTB7
	This brand would compensate you if any problem with this product occurs.	BTB8
Brand experience	You find this brand interesting in a sensory way.	BEB1
	This brand makes a strong impression on your visual sense or other senses.	BEB2
	This brand appeals to your senses.	**BEB3***
	This brand induces feelings and sentiments.	BEB4
	You feel great using this brand.	BEB5
	This brand is an emotional brand.	BEB6
	This brand stimulates your curiosity and problem solving.	BEB7
	This brand does not make you consider much.	BEB8
	You are engaged in a lot of thinking when you encounter this brand.	BEB9
	This brand results in bodily experience.	BEB10
	Your body is revitalised when you have consumed this brand.	**BEB11***
	You have recognised this brand.	BEB12
Expectation	This brand provides the dietary supplements level that you want to be offered.	EB1
	Your needs and wants are fulfilled by this brand.	EB2
	This brand provides benefits corresponding to its price.	EB3
	Your expectations are higher than before consuming this brand.	EB4
	Overall, this brand meets your current expectation.	EB5
Satisfaction	You are so satisfied with this brand that you will recommend it to family, friends, and colleagues.	SB1
	Providing unexpected performance sometimes impresses you deeply and you are so satisfied	SB2
	It is the correct decision to purchase this brand.	SB3
	You are satisfied information content with this brand.	SB4
	You are satisfied with the quality of this brand.	SB5
	Overall, you are so satisfied with this brand.	SB6
Repurchase intention	Overall, you intend to continue buying this brand, rather than any alternative.	RB8

Note: *items deleted in the modified model

Therefore, the study turned to MIs (see Appendix B-3.4.1), the error covariance of misfit, which was larger than those remaining lay in e2 and e1 (MI=76.955), e4 and e5 (MI=75.351), e4 and e6 (MI=65.084), e5 and e6 (MI=62.321), e6 and e7 (MI=40.824) e8 and e9 (MI=40.315). Thus the study needs to modify the model again.

A review of the fit indices in Table 6.17 revealed the modified model, which was based on 30 items of P-PE factors, to be better than the original one. Particularly, the overall fit values of χ^2/df = 3.264, GFI, AGFI, NFI, and CFI was increased gradually to 0.852 (from 0.771), 0.824 (from 0.735), 0.909 (from 0.870), and 0.935 (from 0.896) respectively, these means that all of them were improved, and the reduction of RMSEA to 0.067 (from 0.082) also showed this, as Byrne, (2001) and Schumacker and Lumax (2004) state that AGFI and GFI values are acceptable, even they are less than the level of threshold, and with values close to 1.00 indicative of good fit. Besides χ^2 between the original model and modified model, the comparison value was 721.394 (i.e.1994.387-1272.993) which yielded a difference in χ^2 of 721.394 and indicated the improvement of fit (see Appendix B-3.4.2). As a result, the research considered the modified model to represent the fit model of P-PE for repurchase intentions of credence products. The final modified model of P-PE for repurchase intentions of credence products for the brand perspective is shown in Figure 6.6.

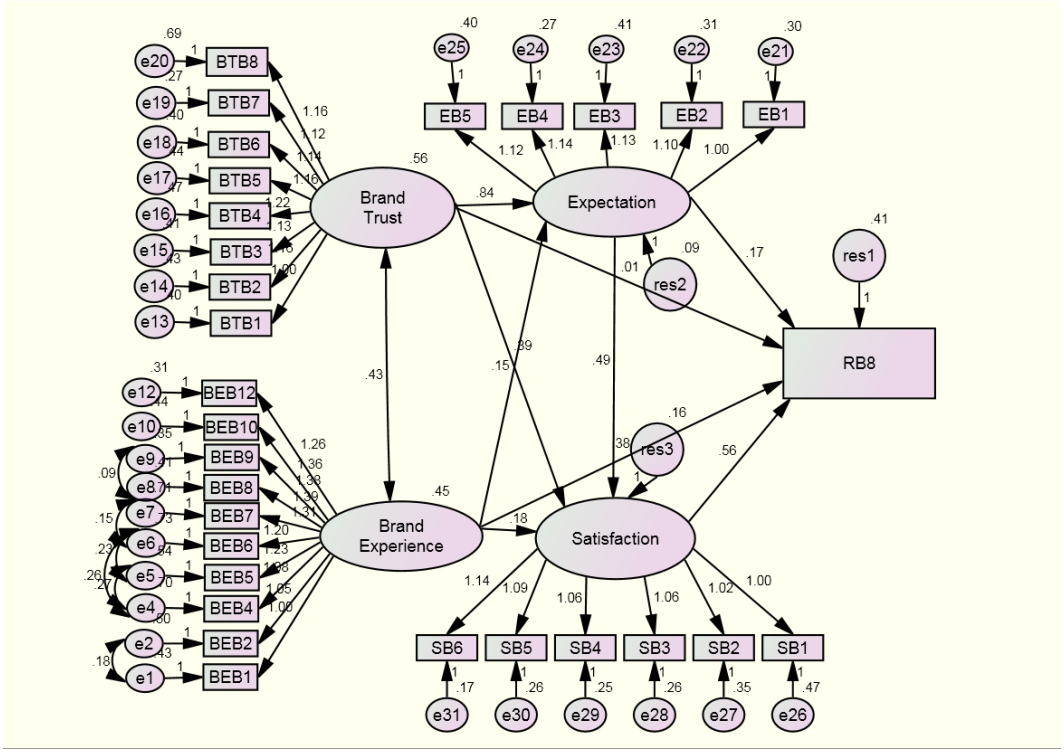


Figure 6.6 Measurement CFA model of P-PE for repurchase intention of credence products: consumers' brand perspective (the modified model)

In sum, after the study had specified the final model, it was necessary to verify the parameter values that are correlated with the literature. The study turns to factor loading parameter estimate of both perspectives. All standard values of consumers' product perspective and consumers' brand perspective were acceptable; the estimate values were reasonably significant (see Appendix B-3.2.3 and Appendix B-3.4.3).

6.4.1.2 Specifying and assessing the structural equation model for path analysis

In this part, the study investigates the structural relationships between the constructs. The structural theory is based on the analysis of path diagram, P-PE for repurchase intention of credence products underlying the P-PE factors literature and P-PE behaviour of dietary supplements users in Thailand. The research summarises the construct in the following section.

(1) Consumers' product perspective

(1.1) Specifying the structural equation model for path analysis

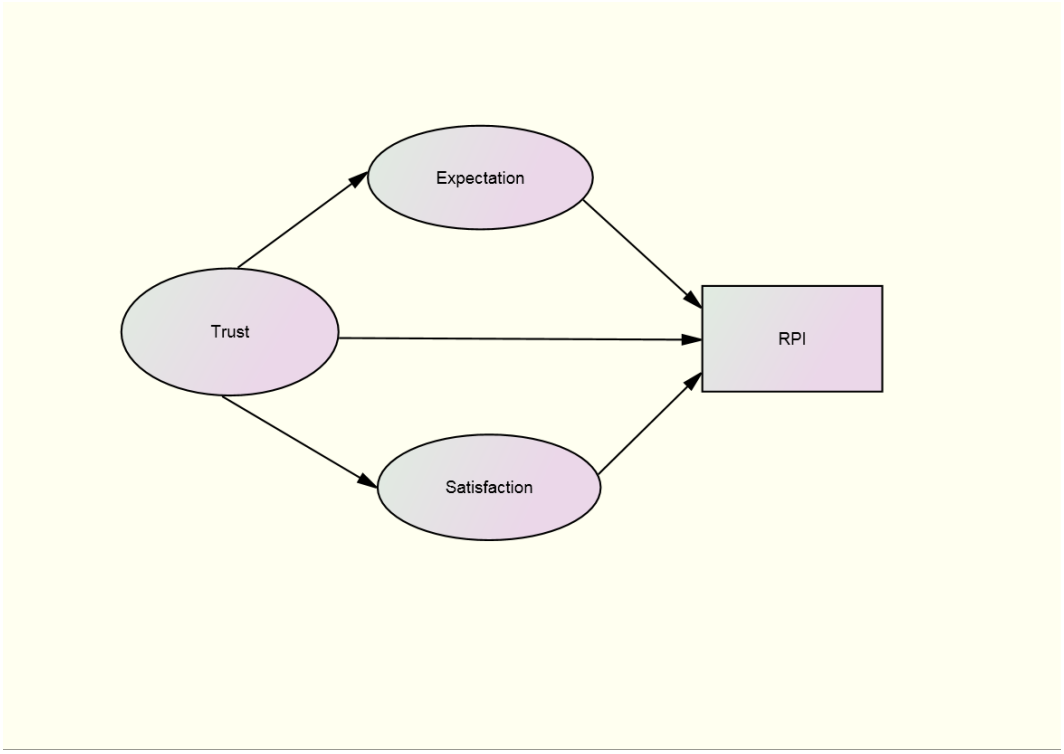
The consumers' product perspective model consists of four constructs: trust, expectation, satisfaction, and repurchase intention. The study classifies the construct variables into two main constructs: exogenous; and endogenous. The study has five structural relationships as summarised in Table 6.19, and illustrates the path diagram of the theory literature in Figure 6.7. The hypotheses testing for the model development is presented in Table 6.20.

Table 6.19 Identification of constructs from consumers' product perspective

Exogenous constructs	Endogenous constructs	Structural relationships
Trust	Repurchase intention	Trust → Repurchase intention
		Trust → Expectation
		Trust → Satisfaction
Expectation	Expectation	Expectation → Repurchase intention
Satisfaction	Satisfaction	Satisfaction → Repurchase intention

Adapted from Hair *et al.* (2010)

According to Table 6.19, this study determines that the constructs of trust, expectation, and satisfaction are exogenous constructs. Moreover, expectation and satisfaction also act as an endogenous constructs in the model as all relationship testing can be estimated in SEM (Hair *et al*., 2010). The endogenous constructs in this study are repurchase intention, expectation, and satisfaction.



Note: RPI was a symbol of repurchase intention, in this study was RP8

Figure 6.7 P-PE model for repurchase intentions for repurchase intentions of credence products: consumers' product perspective (path diagram)

Figure 6.7 shows that all single-headed arrows are connected between exogenous constructs and endogenous which are associated with hypothesis relationships of the model. As a result, the study summarises the hypothesis testing of the

consumer product perspective in Table 6.20 and the results are reported in the next section.

Table 6.20 Hypotheses testing for consumers' product perspective

	Hypotheses
H1	Consumer trust has a direct effect on consumer repurchase intentions of credence products.
H2	Consumer trust has a direct effect on consumer expectations of credence products.
H3	Consumer trust has a direct effect on consumer satisfaction of credence products.
H4	Consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence product
H5	Consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence product
H6	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.
H7	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.

Source: Researcher's fieldwork

(1.2) Assessing the significance of direct and indirect relationship between constructs

The modified model does not indicate the relationship between constructs, yet it tests the model fit (Hair *et al*., 2010). Therefore, the researcher needs to discuss mediation, which concentrates on the relationship between constructs of this model. Mediation consists of two effects: direct; and indirect. Direct effects determine the relationship between two constructs with a single narrow as illustrated in Table 6.19. Indirect effects are related to two or more direct effects and are connected by multiple arrows. In this part, the present study proposes to assess the significance of direct and indirect relationships between constructs in both consumer perspectives. The hypothesis testing is examined by SEM.

As seen in the previously modified model in Section 6.4.1.1 the hypothesised model in this study is based on the modified model of 25 item-subscale and the number of inputs of consumers' product perspective variables as shown in Table 6.21. The number of items for expectation, satisfaction, and repurchase remain unchanged, while the description of the trust construct was reduced from fourteen to thirteen items.

Table 6.21 Number of input items of consumers' product perspective

Constructs	Variable name	Description
Trust	TP	13 item-subscale
Expectation	EP	5 item- subscale
Satisfaction	SP	6 item- subscale
Repurchase intention	RP8	1 item- subscale

Source: Researcher's fieldwork

The relationship between exogenous (trust, expectation, and satisfaction) and endogenous (repurchase intention) is explained in Table 6.19. The direct and indirect effects of the mediation of P-PE for repurchase intention of credence product model are presented in Figure 6.8 and 6.9, respectively.

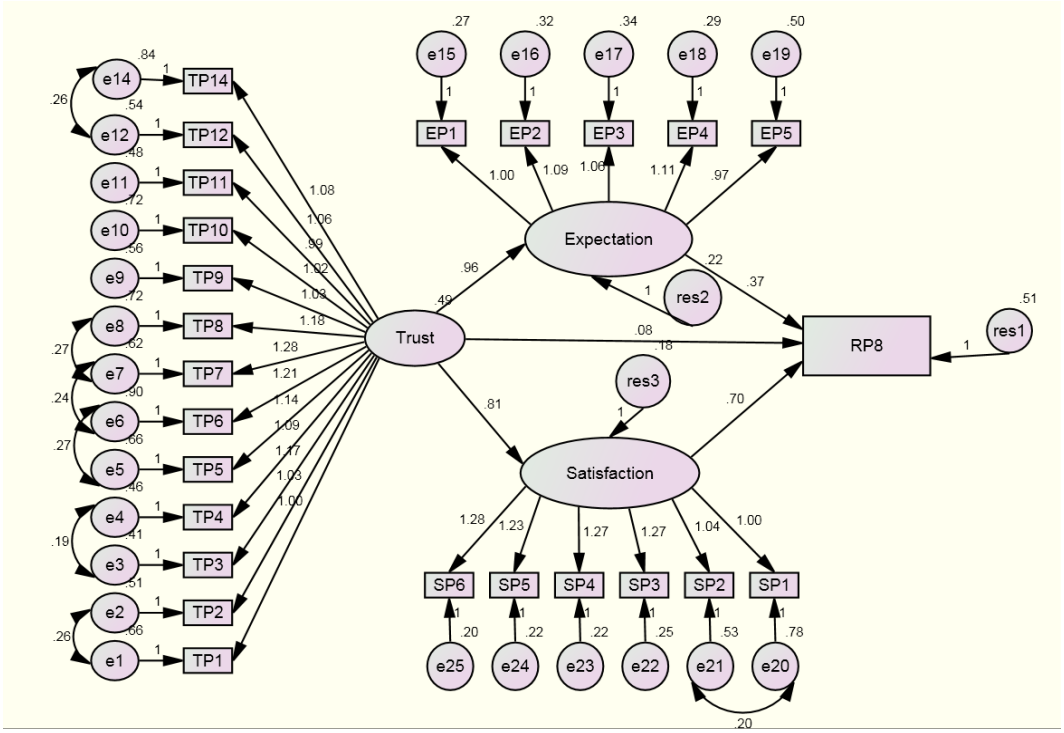


Figure 6.8 Path model of P-PE for repurchase intention of credence products: consumers' product perspective (direct model)

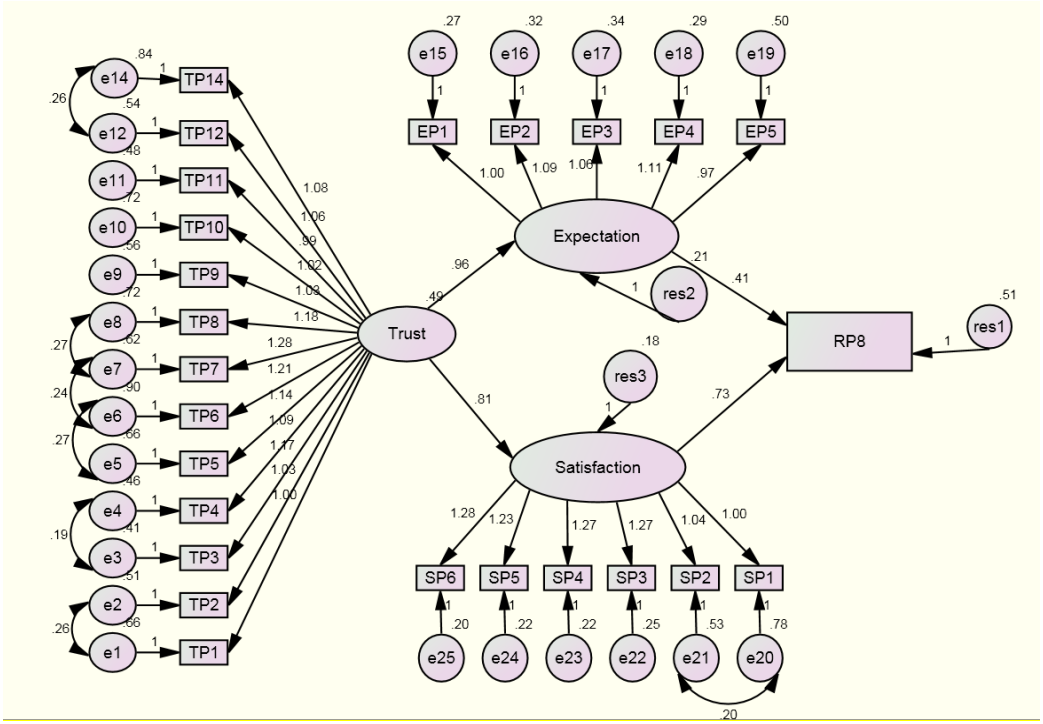


Figure 6.9 Path model of P-PE for repurchase intention of credence products: consumers' product perspective (indirect model)

(1.3) Comparison of goodness of fit: direct and indirect model

Table 6.22 compares the goodness-of-fit statistics after testing the direct and indirect effects from the modified model (see Appendix B-4.1.1 and B-4.2.1).

Table 6.22 Goodness-of-fit statistics of direct and indirect model for consumers' product perspective

Goodness-of-fit indices(GOF)	**Interpretation a good model fit**	**Modified model with direct effect**	**Modified model with indirect effect**
Absolute Fit Indices			
χ^2	-	1256.066	1256.588
P	p>0.05	0.000	0.000
DF	$p \geq 0$	264	265
χ^2 /df	2 to 5	4.758	4.742
GFI	≥0.90	0.827	0.827
AGFI	≥0.90	0.787	0.787
RMSEA	≤0.08	0.086	0.086
Incremental Fit Indices			
NFI	>0.90	0.901	0.878
CFI	≥0.95	0.878	0.901
Parsimonious Fit Indices			
PGFI	≥0.50	0.671	0.674
PNFI	≥0.50	0.773	0.766

Standardized regression weight	**Regression weight**	***P value***	**Regression weight**	***P value***
Trust ⟶ Expectation	0.823	0.000	0.824	0.000
Trust ⟶ Satisfaction	0.798	0.000	0.798	0.000
Expectation ⟶ Repurchase intention	0.289	0.000	0.319	0.000
Satisfaction ⟶ Repurchase intention	0.466	0.000	0.488	0.000
Trust ⟶ Repurchase intention	0.054	0.536	-	-

Note: statistical significance at 0.05 level

The goodness-of-fit statistics of direct and indirect model for the consumer product perspective were significant; the overall χ^2 of the modified model with direct effect was 1256.066, df=264 and modified model with indirect effect χ^2 = 1256.588, df= 265, respectively. The other GOF indices of both model were χ^2 /df, PGFI, and PNFI appeared to give good model fit values, whereas GFI, AGFI RMSEA , and CFI were close to the fit values. Only NFI value of the direct and

indirect model showed different results: the indirect model of NFI met the level of threshold while NFI value of indirect model was close to the threshold. This means that the direct and indirect effect model indicated that it was fairly well-fitting. However, the study compared the goodness of fit index values of both models in order to choose the best model for the research. As shown in Table 6.22, χ^2, df, CFI, and PGFI values of the direct model were less than the indirect one. GFI, AGFI, RMSEA values of the direct model were equal to the indirect model; only χ^2 /df, NFI, and PNFI values of direct model was higher than that of the indirect one. As a result, the direct model was chosen for this study because it indicated a better fit rather than the indirect model.

(1.4) Estimating the mediated model and assessing the level of mediation

The mediation of the direct model was to test the significance of a relationship between two constructs. According to the goodness of fit in Table 6.22, the difference between the modified model and the direct and indirect models was significant ($\Delta\chi^2$= 0.522, df= 1, p=0.000); the χ^2 with the direct model decreased and was less than the indirect model (see Appendices B-4.1.2 and B-4.2.2). The results of path estimate are summarised in Table 6.23.

Table 6.23 Path estimate results for consumers' product perspective

Path estimate	Modified model with direct effect		Modified model with indirect effect		Results
	Regression weight	*P value*	Regression weight	*P value*	
Trust ⟶ Expectation	0.823	0.000	0.824	0.000	Supported
Trust ⟶ Satisfaction	0.798	0.000	0.798	0.000	Supported
Expectation ⟶ Repurchase intention	0.289	0.000	0488	0.000	Supported
Satisfaction ⟶ Repurchase intention	0.466	0.000	0.319	0.000	Supported
Trust ⟶ Repurchase intention	0.054	0.536	-	-	Rejected

Source: Researcher's fieldwork, (n=504)

The path estimate of the direct relationship with direct effect model among trust and expectation, trust and satisfaction, expectation and repurchase intention, and satisfaction and repurchase intention is significant, with a *p value* less than 0.05 ($p \leq 0.05$), which meant that the hypothesis relationship is supported. On the other hand, the relationship between trust and repurchase intention with the direct model is not correlated at a *p value* higher than 0.05 ($p \geq 0.05$) and the hypothesis relationship of H1 is rejected. Therefore, the direct model supports the hypotheses H2, H3, H6 and H7.

As for the indirect model, the mediating effects are shown in Table 6.24.

Table 6.24 Mediating effect results for consumers' product perspective

Path estimate	Results
Trust ⟶ Expectation ⟶ repurchase intention	Supported
Trust ⟶ Satisfaction ⟶ repurchase intention	Supported

Source: Researcher's fieldwork, (n=504)

Two indirect mediating effects emerged: expectation and satisfaction have a mediating effect on the relationship between consumer trust and consumer repurchase intentions. This is explained by the significant effects on the direct relationship between trust and expectation; trust and satisfaction; expectation and repurchase intention; and satisfaction and repurchase intention. Therefore, all path estimate mediators were significantly correlated at a *p value* less than 0.05 (see Table 6.23). As a result, the indirect effect model supports the hypotheses H4 and H5.

(2) Consumers' brand perspective

(2.1) Specifying the structural equation model for path analysis

From the consumer brand perspective, the P-PE model for repurchase of credence products hypothesizes that brand trust, brand experience, expectation and satisfaction are all correlated with repurchase intention. The construct of this study has grouped variables into two main constructs: exogenous and endogenous. The study has one correlation relationship and nine structural relationships as summarised in Table 6.25, and designed the path diagram of the theory literature as displayed in Figure 6.8. Hypothesis testing for the model development is elaborated in Table 6.26.

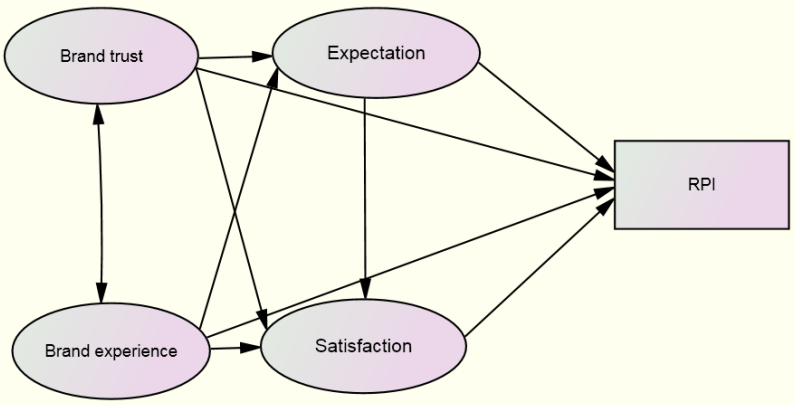
Table 6.25 The identification of constructs from consumers' brand perspective

Exogenous constructs	**Endogenous constructs**	**Correlation Relationships**	**Structural relationships**
Brand trust	Expectation	Brand trust ↔ Brand experience	Brand trust → Expectation
Brand experience	Satisfaction		Brand trust → Satisfaction
Expectation	Repurchase intention		Brand trust → Repurchase intention
Satisfaction			Brand experience → Expectation
			Brand experience → Satisfaction
			Brand experience → Repurchase intention
			Expectation → Satisfaction
			Expectation → Repurchase intention
			Satisfaction → Repurchase intention

Adapted from Hair *et al.* (2010)

Table 6.25 illustrated that the exogenous constructs consist of two variables: brand trust and brand experience in this model, which has no single-headed arrows. There is an indication of covariance between the constructs, which is

necessary for estimation in the SEM model. Moreover, expectation and satisfaction also act as an exogenous constructs in the model as all relationship testing can be estimated in SEM (Hair *et al*., 2010). Expectation, satisfaction, and repurchase intention are endogenous constructs of this model. Further, the hypothesis testing from the consumer brand perspective and the structural path model are developed from exogenous constructs. Figure 6.10 shows all single-headed arrows are placed in connection with exogenous constructs and also endogenous constructs.



Note: RPI signifies repurchase intention. In this study it was RB8

Figure 6.10 P-PE model for repurchase intention of credence products: consumers' brand perspective (path diagram)

The hypothesis testing of the consumer brand perspective is summarised in Table 6.26 and the results are reported in the next section.

Table 6.26 Hypothesis testing for consumers' brand perspective

	Hypotheses
H8	Consumer brand trust has a direct effect on consumer repurchase intentions of credence products.
H9	Consumer brand trust has a direct effect on consumer expectations of credence products.
H10	Consumer brand trust has a direct effect on consumer satisfaction of credence products.
H11	Consumer expectations have a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product
H12	Consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product
H13	Consumer brand experience has a direct effect on consumer repurchase intentions of credence products.
H14	Consumer brand experience has a direct effect on consumer expectations of credence products.
H15	Consumer brand experience has a direct effect on consumer satisfaction of credence products.
H16	Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence product
H17	Consumer satisfaction has a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence product.
H18	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.
H19	Consumer expectations have a direct effect on consumer satisfaction of credence products.
H20	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.
H21	Consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intentions of credence products.

Source: Researcher's fieldwork

(2.2) Assessing the significance of direct and indirect relationship between constructs

The hypothesised model from the brand perspective is based on the modified model 30 item-subscale and the number of the input from the product perspective variables is shown in Table 6.27. The number of items of brand trust, expectation, satisfaction, and repurchase remains unchanged, while the subscale from the brand experience was revised from twelve to ten items.

Table 6.27 Number of input items of consumers' brand perspective

Constructs	Variable name	Description
Brand experience	BEB	10 item-subscale
Brand trust	BTB	8 item-subscale
Expectation	EB	5 item-subscale
Satisfaction	SB	6 item-subscale
Repurchase intention	RB	1 item-subscale

Adapted from Hair *et al.* (2010)

The study illustrates a direct and indirect effect of the mediation of P-PE for repurchase intentions of the credence product model in Figures 6.11 and 6.12. The relationship between the exogenous (brand trust and brand experience) and the endogenous (expectation, satisfaction, and repurchase intention) constructs is shown in Table 6.25

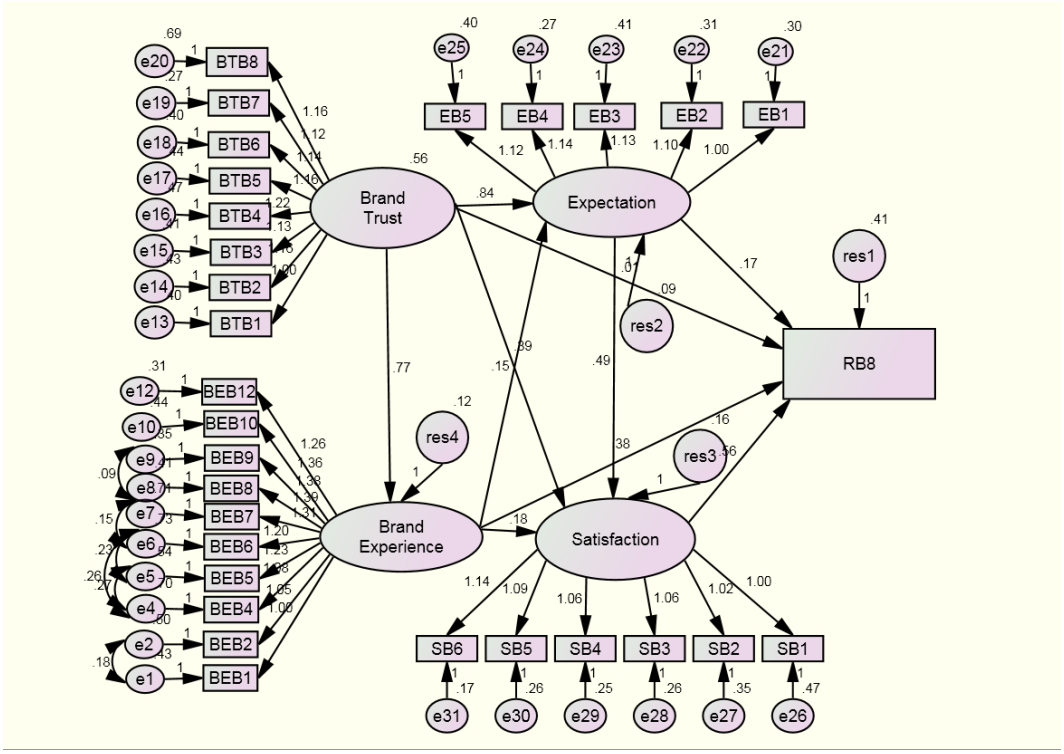


Figure 6.11 Path model of P-PE for repurchase intention of credence products: consumers' brand perspective (the direct model)

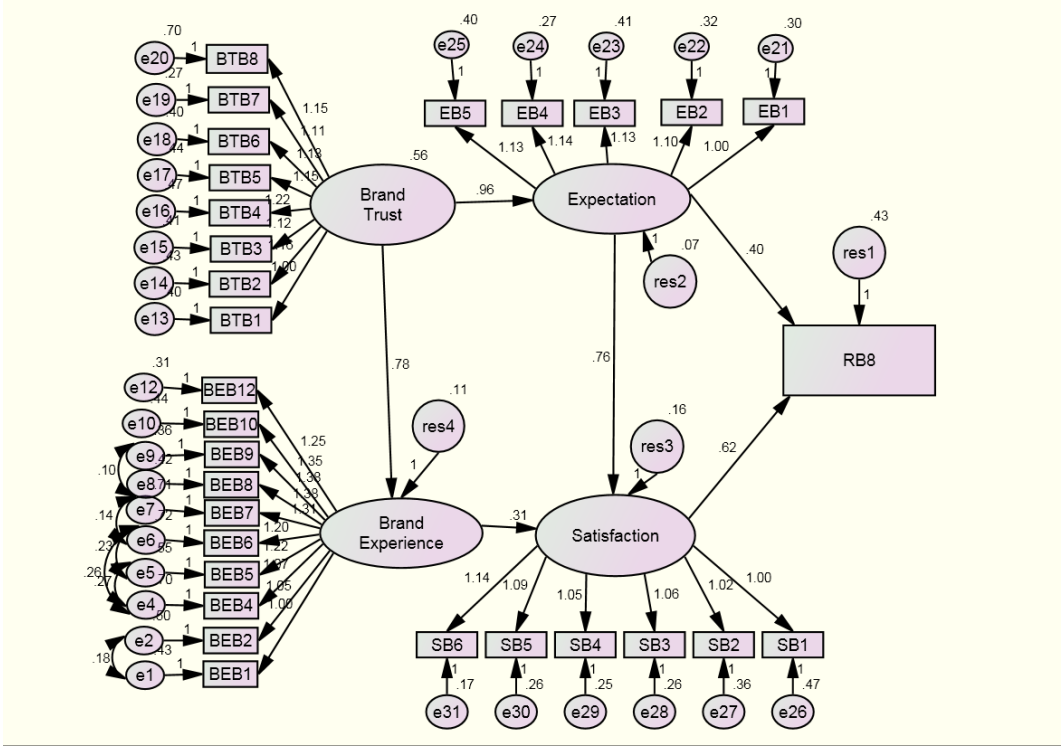


Figure 6.12 Path model of P-PE for repurchase intention of credence products: consumers' brand perspective (the indirect model)

(2.3) The comparison of goodness of fit: direct and indirect model

Table 6.28 compares the goodness-of- fit statistics after testing the direct and indirect, which were based on the modified model (see Appendices B-5.1.1 and B-5.2.1).

Table 6.28 Goodness-of-fit statistics of direct and indirect model for consumers' brand perspective

Goodness-of-fit indices(GOF)		Modified model with direct effect		Modified model with indirect effect	
Absolute Fit Indices					
χ^2	-	1272.993		1302.64	
P	p>0.05	0.000		0.000	
DF	$p \geq 0$	390		394	
X^2/df	2 to 5	3.264		3.306	
GFI	≥0.90	0.852		0.850	
AGFI	≥0.90	0.824		0.823	
RMSEA	≤0.08	0.067		0.068	
Incremental Fit Indices					
NFI	>0.90	0.909		0.907	
CFI	≥0.95	0.935		0.933	
Parsimonious Fit Indices					
PGFI	≥0.50	0.715		0.720	
PNFI	≥0.50	0.815		0.822	
Standardize regression weight		**Regression weight**	***P value***	**Regression weight**	***P value***
Brand trust → Brand experience		0.860	0.000	0.870	0.000
Brand trust → Expectation		0.809	0.000	0.938	0.000
Brand experience → Expectation		0.133	0.024	-	-
Expectation→ Satisfaction		0.441	0.000	0.676	0.000
Brand experience → Satisfaction		0.138	0.021	0.243	0.000
Brand trust → Satisfaction		0.336	0.001	-	-
Expectation → Repurchase intention		0.123	0.266	0.294	0.000
Satisfaction→ Repurchase intention		0.463	0.000	0.513	0.000
Brand trust → Repurchase intention		0.006	0.959	-	-
Brand experience → Repurchase intention		0.244	0.000	-	-

Note: Statistic significance (p<0.05), (n=504)

The goodness-of-fit statistics of the direct and indirect model from the brand perspective are significant; the overall χ^2 of modified model with direct effect was 1272.993, df=390 and modified model with indirect effect χ^2 = 1302.64, df= 394 respectively. The other GOF indices of both models were χ^2 /df, RMSEA, NFI, PGFI, and PNFI, which indicated a good model fit, whereas GFI, AGFI, and CFI were close to the fit values. Both the direct and indirect effect models suggest a fairly well-fitting model. However, the study compares the goodness of fit index values between both models in order to consider the best model for this research.

As seen in Table 6.27, χ^2, df, χ^2 /df, RMSEA, PGFI, and PNFI values of direct model were less than those of the indirect model. Further, GFI, AGFI, NFI, and CFI of the direct model were higher than those of the indirect model. As a result, the direct model was a significantly better fit than the indirect model, which needs to be taken into account.

(2.4) Estimating the mediated model and assessing the level of mediation

The mediation of the direct model effect was to test the significance of the relationship hypotheses between two constructs. According to the goodness of fit values in Table 6.28, the modified model with direct and indirect model effect was statistically significant at 0.05 level: the difference of χ^2 between both models was ($\Delta\chi^2$= 29.647, df= 2, p=0.000) while the direct model dropped by 29.647, which yet improved in the model fit (see Appendices B-5.1.2, and B-5.2.2). The results of path estimate are summarised in Table 6.29.

Table 6.29 Path estimate results for consumers' brand perspective

Standardize regression weight	Direct model			Indirect model		
	Regression weight	***P value***	**Results**	**Regression weight**	***P value***	**Results**
Brand trust ⟶ Brand experience	0.860	0.000	Supported	0.870	0.000	Supported
Brand trust ⟶ Expectation	0.809	0.000	Supported	0.938	0.000	Supported
Brand experience ⟶ Expectation	0.133	0.024	Supported	-	-	-
Expectation ⟶ Satisfaction	0.441	0.000	Supported	0.676	0.000	Supported
Brand experience ⟶ Satisfaction	0.138	0.021	Supported	0.243	0.000	Supported
Brand trust ⟶ Satisfaction	0.336	0.001	Supported	-	-	-
Expectation ⟶ Repurchase intention	0.123	0.266	Rejected	0.294	0.000	Supported
Satisfaction ⟶ Repurchase intention	0.463	0.000	Supported	0.513	0.000	Supported
Brand trust ⟶ Repurchase intention	0.006	0.959	Rejected	-	-	
Brand experience ⟶ Repurchase intention	0.244	0.000	Supported	-	-	

Note: Statistical significance (p<0.05), (n=504)

The path estimate of direct relationships with direct effect model among brand trust and brand experience; brand trust and expectation; brand trust and satisfaction; brand experience and expectation; brand experience and satisfaction; brand experience and repurchase intention; expectation and satisfaction; and satisfaction and repurchase intention has a significant effect when the *p value* is less than 0.05 ($p \leq 0.05$), which suggested that the hypothesis relationship is supported. On the other hand, the direct mediated effects between brand trust and repurchase intention and those between expectation and repurchase intention were unrelated when the *p value* is higher than 0.05 ($p \geq 0.05$) and thus the hypothesis relationship of H8 and H18 was rejected. Therefore, the hypothesis of direct effect model supported the hypotheses: H9, H10, H13, H14, H15, H19 and H20.

The indirect effect model of the mediating effects is shown in Table 6.30.

Table 6.30 Mediating effects results for consumers' brand perspective

Path estimate	Results
brand trust → expectation → repurchase intention	Rejected
brand trust → brand experience → repurchase intention	Supported
brand trust → satisfaction → repurchase intention	Supported
brand experience → expectation → repurchase intention	Rejected
brand experience → satisfaction → repurchase intention	Supported
expectation → satisfaction → repurchase intention	Supported

Source: Researcher's fieldwork, (n=504)

Four indirect mediating effects were supported: (1) brand experience has a mediating effect on the relationship between brand trust and repurchase intention; (2) satisfaction has a mediating effect on the relationship between brand trust and repurchase intention; (3) satisfaction has a mediating effect on the relationship between brand experience and repurchase intention; and (4) satisfaction has a

mediating effect on the relationship between expectation and repurchase intention. In the meantime, two indirect mediating effects were rejected (1) expectation has a mediating effect on the relationship between brand trust and repurchase intention; (2) expectation has a mediating effect on the relationship between brand experience and repurchase intention.

As a result, the indirect effect model supported the hypotheses H12, H17 and H21 and rejected H11, H16.

The results of these hypotheses are explained by the significant direct effects on the relationship between brand trust and brand experience; brand trust and expectation; brand trust and satisfaction; brand experience and expectation; brand experience and satisfaction; brand experience and repurchase intention; expectation and satisfaction and satisfaction and repurchase intention. Therefore, all path estimate mediators are significantly correlated when the *p value* is less than 0.05. On the other hands, two direct effect the relationships between brand trust and repurchase intention; and expectation and repurchase intention are not correlated when the *p value* is higher than 0.05 (see Table 6.29).

6.4.1.3 Summary of hypotheses results by structural equation modelling (SEM)

(1) Consumers' product perspective

Table 6.31 Summary of hypotheses relating to consumers' product perspective

	Hypotheses	Results
H1	Consumer trust has a direct effect on consumer repurchase intentions of credence products.	Rejected
H2	Consumer trust has a direct effect on consumer expectations of credence products.	Supported
H3	Consumer trust has a direct effect on consumer satisfaction of credence products.	Supported
H4	Consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions.	Supported
H5	Consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence product	Supported
H6	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.	Supported
H7	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.	Supported

Source: Researcher's fieldwork

(2) Consumers' brand perspective

Table 6.32 Summary of hypotheses relating to consumers' brand perspective

	Hypotheses	Results
H8	Consumer brand trust has a direct effect on consumer repurchase intentions of credence products.	Rejected
H9	Consumer brand trust has a direct effect on consumer expectations of credence products.	Supported
H10	Consumer brand trust has a direct effect on consumer satisfaction of credence products.	Supported
H11	Consumer expectations have a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product.	Rejected
H12	Consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product	Supported
H13	Consumer brand experience has a direct effect on consumer repurchase intentions of credence products.	Supported
H14	Consumer brand experience has a direct effect on consumer expectations of credence products.	Supported
H15	Consumer brand experience has a direct effect on consumer satisfaction of credence products.	Supported

	Hypotheses	Results
H16	Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence products.	Rejected
H17	Consumer satisfactions have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence products.	Supported
H18	Consumer expectations have a direct effect on consumer repurchase intentions of credence products.	Rejected
H19	Consumer expectations have a direct effect on consumer satisfaction of credence products.	Supported
H20	Consumer satisfaction has a direct effect on consumer repurchase intentions of credence products.	Supported
H21	Consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intentions of credence products.	Supported

Source: Researcher's fieldwork

This study also tests the relationship between dependent variables and independent variables by the regression analysis presented in the next section.

6.4.2 Hypothesis testing in regression analysis

The study summarised the hypothesis relationship by multiple R, R^2value, Adjusted R^2, Anova, and Coefficients of the regression model (*b* value and Beta), and also adjusted the regression model by diagnostics and generalization.

Multiple R refers to the relationship between independent variables and the observed values of dependent variables, which determines how well the observed data can predict the model. If R is a large value, it indicates a highly significant relationship between predictors and the observed value of dependent variables. This value should lie between 0 and 1, whereas, R^2 value refers to the percentage of dependent variables which determines how well the predictors accounted for

the model. An adjusted R^2 value represents the level of variance in the dependent variables which are accounted for in the regression model (Field, 2009).

Anova focuses on *F*-ratio values which confirm model fit. The value should be larger than 1 to illustrates a good model (Field, 2009). The *b*-value points to the relationship between each independent and dependent variable and also indicates the contribution of the model. This value is related to *t* value (*t*-test). The *t* value reveals which independent variables have a significant impact on the model. If *b*-value correlates with *t* value, which has a lesser effect on the model at the value less than 0.05, the predictors significantly contribute to the model (Field, 2009). The value of *t* (df) is a degree of freedom in regression, which is calculated by (N-p-1, 504-14-1=489) (N=the total of sample size, *p*=the number of predictors) (Field, 2009).

6.4.2.1 Estimating and assessing the regression model by diagnostics

With a focus on outliers and residuals as well as inferential cases, the study assessed the model by diagnostics to find out whether or not the data fit the model.

(1) Outliers and residuals

Outliers are used to predict the appropriate model for this study. A residual is an outcome which indicates which is the accurate model. In general, the researcher

used standardized residuals in order to measure whether the model is a good fit and also the appropriateness of the values. A normal distribution sample has three criteria of the percentage of distribution (z-score): 95% of z-score, the values of which are not over +1.96 and -1.96; 99% of z-score, the values which are not higher than +2.58 and -2.58; and 99.99% of z-score, with values not greater than +3.29 and -3.29. Therefore, the cases of sample size of standard residuals values are not larger than 5%, 1%, and 0.01%, respectively (Field, 2009).

(2) Influential cases

Cook's distance value is a statistic that can indicate the overall case in the model when a significant value is less than 1. For other statistics, the Mahalanobis distance measures how far the case is distant from the mean of all cases of independent variables, which depend on the sample size of the study. For cases of below 5% of the total sample size, 504 samples DFBetas indicated the difference between the parameters, which was less than 2. These indicate that the model was suitable (Field, 2009).

6.4.2.2 Interpreting the regression model by generalization

After the regression model has been produced, the study confirms the assumptions by four criteria of generalization.

(1) Independent residuals

The study tests the independent variables error by the Derbin-Watson value. If it is less than 2 or close to 2, the assumption is supported and indicates a positive relationship (Field, 2009).

(2) Linearity and homoscedasticity

The partial regression plots and residuals indicate whether or not the assumption is satisfied. Overall the dependent variable and predictor variables are linear. Homoscedasticity illustrates the independent variables residuals and the residuals value should have the same variance (Field, 2009; Hair *et al*., 2010).

(3) Normally distributed errors

In general, the residuals of the model are interpreted by a distribution variable of 0. The histogram and normality residual plots also illustrate a normal distribution. The histogram should illustrate a normal curve while the normality residuals graph should stay at the normal line (Field, 2009; Hair *et al*., 2010).

(4) The degree and impact of multicollinearity

Tolerance and VIF are two main values that indicate an impact of a wide range of multicollinearity. Tolerance value is related to VIF and the values should be as

high as 0.2. VIF points out the strong linear relationship with the other independent variables when the value is less than 10 (Torrelance >0.2, VIF≤10) (Field, 2009), which indicate a suitability model. This means that multicollinearity values do not distort the regression model (Hair *et al*., 2010).

The following section examines the hypotheses testing by regression analysis for both consumer perspectives.

6.4.3 Hypothesis testing in regression analysis for consumers' product perspective

Table 6.33 illustrates independent variables of the consumers' product perspective, which consists of fourteenth sub-scale items of trust (TP1-TP14); four sub-scale items of expectation (EP1-EP4); five sub-scale items of satisfaction (SP1-SP5); seven sub-scale items of repurchase intentions (RP1-RP7); and three dependent variables (EP5, SP6 and RP8). Moreover, two mediators (EP5 and SP6) are tested for a mediating effect on the relationship between and independent variables.

Table 6.33 The items of consumers' product perspective

Variable	Independent variables	Symbol
Trust	The quality of this product has been very consistent.	TP1
	The product has a good performance/quality.	TP2
	The production process of the product is trustworthy.	TP3
	The quality control process of the product is trustworthy.	TP4
	The firm of the product is trustworthy.	TP5
	The firm of the product keeps its promises made to customers.	TP6
	The firm of the product has a reputation for honesty.	TP7
	The firm of the product is renowned for attending to customers' needs and wants.	TP8
	The quality and safety of the safety are certified by third party organisations or governments.	TP9
	The product is certified by standard assurances.	TP10
	Nutritional benefits are trustworthy (e.g. boosting the immune system, filling a dietary imbalance).	TP11
	Nutrition information is trustworthy.	TP12
	Ingredient information is trustworthy.	TP13
	Side effect information is trustworthy.	TP14
Expectation	This product provides the dietary supplements level that you want to be offered.	EP1
	Your needs and wants are fulfilled by this product.	EP2
	This product provides benefits corresponding to its price.	EP3
	Your expectations are higher than before consuming this product.	EP4
Satisfaction	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	SP1
	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	SP2
	It is the correct decision to purchase this product.	SP3
	You are satisfied with information content this product.	SP4
	You are satisfied with the quality of this product.	SP5
Repurchase intention	The product has a good performance and quality.	RP1
	The product makes you feel healthier.	RP2
	The product fulfils your needs.	RP3
	The product has a reasonable price.	RP4
	You have faith in this product.	RP5
	It is convenient to buy this product.	RP6
	This product can solve your problems/concerns.	RP7
	Mediators and dependent variables	
Expectation	Overall, the products meet your current expectation.	EP5
Satisfaction	Overall, you are so satisfied with the products.	SP6
	Dependent variable	
Repurchase intention	Overall, you intend to continue buying this product, rather than any alternative.	RP8

Source: Researcher's fieldwork

The hypothesis relationship of the consumer product perspective is shown in Table 6.34.

Table 6.34 Hypothesis testing of consumers' product perspective

	Hypotheses
H1	Consumer trust (TP1-TP14) has a positive overall effect on consumers who intend to continue buying this product, rather than any alternative (RP8).
H2	Consumer trust (TP1-TP14) has a positive overall effect on the products that meet your current expectation (EP5)
H3	The overall effect on how products meet your current expectation (EP5) has a positive effect on your intention to continue buying this product, rather than any alternative (RP8).
H4	Relationship between consumer trust (TP1-TP14) and your overall intention of continue buying this product, rather than any alternative (RP8), is mediated by the overall effect on how the products meet your current expectation (EP5).
H5	Consumer trust (TP1-TP14) has a positive overall effect on your satisfaction with the products (SP6).
H6	Your overall satisfaction with the products (SP6) has a positive effect on your overall intention to continue buying this product, rather than any alternative (RP8).
H7	The relationship between consumer trust (TP1-TP14) and your intention to continue buying this product, rather than any alternative (RP8), is mediated by your overall satisfaction with the products (SP6).
H8	The rationale of expectation (EP1-EP4) has a positive effect on overall consumer intention to continue buying this product, rather than any alternative (RP8).
H9	The rationale of satisfaction (SP1-SP5) has a positive effect on the overall consumer intention to continue buying this product, rather than any alternative (RP8).
H10	The rationale of expectation (EP1-EP4) has a positive overall effect on how the products meet the consumers' current expectation (EP5).
H11	The rationale of satisfaction (SP1-SP5) has a positive effect on the overall consumer satisfaction with the product (SP6).
H12	The rationale of repurchase intentions (RP1-RP7) has a positive effect on the overall intention to continue buying this product, rather than any alternative (RP8).

The results of hypotheses testing are discussed in the following section.

6.4.3.1 Hypotheses testing for H1-H4

H1: Consumer trust (TP1-TP14) has a positive overall effect on consumers who intend to continue buying this product, rather than any alternative (RP8).

The correlation between the independent variables of TP1-TP14 and dependent variables of RP8 was confirmed (see Appendix C-1.1.1). The correlation value of TP2 was 0.521 with the highest positive values with RP8. Both correlation and

partial correlation values were verified by a significant value of less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of RP8. Other predictors with a high value were TP3 (0.495), TP4 (0.483), TP1 (0.478), and TP9 (0.474), respectively.

The model summary indicated a successful predictor of RP8 and the overall model fit. The multiple R for this data was 0.632, R^2 was 0.399. Trust accounted for 40% of the overall of RP8. These variables were significant ($p<0.001$) at a level less than 0.05 ($p<0.05$) and thus correlated to RP8. Adjusted R^2 =0.382 proved that the level of RP8 accounted for the regression model. The F-ratio was 23.197, $p<0.001$ with 14 and 489 degrees of freedom. All variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data were of a significant fit (see Appendix C-1.1.2).

The b values presented both positive and negative relationships: 12 predictors (TP1, TP2, TP4, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, and TP14) had a positive relationship with RP8 while two predictors (TP3 and TP5) had a negative relationship with RP8. The beta coefficients showed the most important relationships between predictors and outcome variable was TP2, followed by TP9, TP4, TP8, and TP1 respectively. In such a situation, the highest relationship between t values and p values was TP2 (t (489)=3.656, $p<0.001$), followed by TP9 (t (489)=2.988, $p<0.05$), TP4 (t (489)=2.410, $p<0.05$), TP8 (t (489)=2.036, $p<0.05$), and TP1 (t (489)=1.977, $p<0.05$) (see Appendix C-1.1.3).

As a result, nine independent variables were rejected (TP3, TP5, TP6, TP7, TP10, TP11, TP12, TP13, TP14) while five independent variables were supported (TP1, TP2, TP4, TP8, and TP9).

H2: Consumer trust (TP1-TP14) has a positive overall effect on the products that meet your current expectation (EP5)

Among all the correlation values between the independent variables of TP1-TP14 and dependent variables of EP5 which were correlated (see Appendix C-1.2.1), the highest positive values of EP5 was TP2 (0.512). For both correlation and partial correlation values, this variable was verified by a values of less than 0.05 ($p<0.05$) (Field, 2009), which indicated the best predictor of EP5. Furthermore, other predictors with high relationship were: TP13 (0.489), TP3 (0.486), and TP1 (0.479), respectively.

The multiple R for this data was 0.628, R^2 was 0.394, accounting for 40% of EP5. These variables were significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with EP5. Adjusted R^2 was 0.376, signifying the level of EP5 was accounted for the regression model. The F-ratio was 22.691, $p<0.001$ with 14 and 486 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data were significantly appropriate (see Appendix C-1.2.2).

The b values were of both positive and negative relationships: nine items measuring TP1, TP2, TP4, TP5, TP6, TP7, TP9, TP13, and TP14 had a positive

relationship while five components of TP3, TP8, TP10, TP11, and TP12 had a negative relationship with EP5. The beta coefficients showed the most important relationships between predictors and outcome variables; in this situation, they were TP2, followed by TP9, TP1, TP13, and TP8 respectively. TP2 had the strongest relationship between t values and *p* values (t (489) =3.281, $p<0.05$) followed by TP9 (t (489)=2.930, $p<0.05$), TP1 (t (489)=2.695, $p<0.05$), TP13 (t (489)=2.150, $p<0.05$), TP8 (t (489)=-2.392, $p<0.05$) (see Appendix C-1.2.3).

Consequently, nine components were rejected while four components were supported with a positive relationship, and only TP8 had a negative relationship with EP5. This means that if the firm of the product is renowned for attending to customers' needs and wants, the current expectation of the products will decrease. These results contradicted with the current hypothesis which states that the firm of the product is renowned for attending to customers' needs and wants and has a positive overall effect on how the products meet the consumers' current expectation. Therefore, TP8 was not accepted.

H3: Overall effect on how products meet your current expectation (EP5) has a positive effect on your intention to continue buying this product, rather than any alternative (RP8)

Multiple R had a value of 0.571, referring to the simple correlation between EP5 RP8. The value of R^2 was 0.327, which means that EP5 accounted for 32.7% of variation in RP8. The value of F-ratio was 243.364, significant at $p<0.001$. In sum,

the regression overall model predicted that RP8 was significantly well (see Appendix C-1.3.1). Furthermore, *b* value of EP5 was 0.575, a difference from 0 and a significant level at $p<0.001$. Thus, EP5 was a significant contribution to RP8, and hypothesis H3 was also supported (see Appendix C-1.3.2).

H4: Relationship between consumer trust (TP1-TP14) and your overall intention of continue buying this product, rather than any alternative (RP8) is mediated by the overall effect of how the products meet your current expectation (EP5)

In model 1, EP5 explains 32.7% of the variance in RP8 ($R^2 = 0.327$). In model 2, TP1-TP14 was fitted to the data to 0.138 (R^2 Change =0.138, $p<0.001$). The *F*-ratio for the model 1 was 243.364, $p<0.001$ with 1 and 502 degrees of freedom. This showed that the variance explained by EP5 was significant. For model 2, the variance explained by TP1-TP14 was significant; *F*-ratio was 28.174, $p<0.001$ with 15 and 488 degrees of freedom (see Appendix C-1.4.1).

The results of model 1 showed *b* values were in a positive relationship, while *b* values of the model 2 were both positive and negative. EP5 was significant in relation to RP8, thereby meeting the condition for mediation. Conversely, the *b* values for TP1, TP2, TP4, TP8, and TP9 were significantly related to RP8 in the hypotheses testing (H1). At this point, TP1 was no longer significant related to RP8 when testing the mediation of EP5. Thus, the final model also partially met the mediation. The beta coefficients suggested the important relationships were

between TP1-TP14 and RP8. In this situation, the most important was EP5 followed by TP8, TP2, TP4, and TP9, respectively. The highest of t values in this study were EP5 (t (488)=7.694, p<0.001), followed by TP8 (t (488)=2.969, p<0.05); TP2 (t (488)=2.696, p<0.05); TP4 (t (488)=2.178, p<0.05); and TP9 (t (488)=2.123, p<0.05), respectively (see Appendix C-1.4.2).

Therefore, ten predictors (TP1, TP3, TP5, TP6, TP7, TP10, TP11, TP12, TP13, and TP14) were rejected in the assumption while four predictors (TP2, TP4, TP8, and TP9) were supported.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -3.482 to 3.496. There were 22 cases (4.35%). Among these, the values of 14 cases (2.77%) were over ±1.96l; the values of another four (0.80%) were greater than ±2.58; and the values of the other four (0.80%) were higher than ±3.29. Therefore, the study needed to test further (see Appendix C-1.4.3). For this study, influential cases statistics such as Cook's distance, Mahalanobis distance, and DFBetas were used.

Influential cases: The 24 cases of this study had Cook's distance significantly less than 1. According to Mahalanobis distance, the study generated 22 cases from the 504 respondents, which was not obove the threshold of 25 (Field, 2009), so

the model was appropriate. All DFBetas values were less than 2; thereby the model was deemed to be suitable (see Appendix C-1.4.4).

(2) Interpreting the regression variant by generalization

Independent residuals: The Derbin-Watson value of this study was 1.901, which was less than 2 (see Appendix C-1.4.1) so the independent variables in this model did not have an error.

Linearity and homoscedasticity: The graph of standardized residuals shown in Appendix C-1.4.5 shows that the dispersion of points, the linearity and homoscedasticity were met.

Normality distribution: The histogram and normality residuals plots shown in Appendix C-1.4.6 were a normal distribution.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.281-0.606, which is higher than the threshold of 0.2, and VIF values ranged from 1.650-4.015, distant from 10. This meant that multicollinearity values did not distort the regression model (Hair *et al*., 2010) (see Appendix C-1.4.2).

6.4.3.2 Hypothesis testing for H5- H7

H5: Consumer trust (TP1-TP14) has a positive overall effect on your satisfaction with the products (SP6)

The independent variables of TP1-TP14 and the dependent variable of SP6 related (see Appendix C-2.1.1). It was evident that the value of TP3 (0.521) was the highest positive value with SP6 as both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009). This could make for the best predictor of SP6. Furthermore, other predictors with high relationship values were TP7 (0.512), TP4 (0.509), TP12 (0.508), and TP9 (0.500), respectively.

The model summary indicates a successful predictor of SP6, and the overall model fit (see Appendix C-2.1.2). The multiple R for this data was 0.659. R^2 was 0.434, accounting for 43.4% of SP6. These variables were significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with SP6. Adjusted R^2 was 0.434; thereby the level of SP6 accounted for the regression model.

The F-ratio was 26.773, $p<0.001$ with 14 and 489 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicate the overall data had a significant fit. The b values had both positive and negative relationships: eleven items (TP1, TP2, TP4, TP6, TP7, TP8, TP9, TP10, TP11, TP12 and TP13) presented a

positive relationship while three components (TP3, TP5, and TP14) were in a negative relationship with SP6. In addition the beta coefficients displayed important relationships between variables. The most important was TP9, followed by TP4, TP7, TP1, and TP12, respectively. The results of t values showed that TP9 (t (489)=3.026, p<0.05), TP1 (t (489)=2.313, p<0.05), TP4 (t (489)=2.311, p<0.05), TP7 (t (489)=2.181, p<0.05), and TP12 (t (489)=1.978, p<0.05) (see Appendix C-2.1.3).

As a result, nine independent variables (TP2, TP3, TP5, TP6, TP8, TP10, TP11, TP13, and TP14) were rejected while five independent variables (TP1, TP4, TP7, TP9, and TP12) were in a positive relationship with SP6.

H6: Your overall satisfaction with the products (SP6) has a positive effect on your overall intention to continue buying this product, rather than any alternative (RP8)

Multiple R had a value of 0.663, representing the simple correlation between SP6 and RP8. The value of R^2 was 0.440; thereby SP6 accounted for 44% of variation in RP8. The value of the F-ratio was 394.575, which was significant at p<0.001. Thus, the regression model overall predictors of RP8 were significant (see Appendix C-2.2.1). Furthermore, the b value of SP6 was 0.705, different from 0 and significant at p<0.001. So SP6 makes a significant contribution to RP8, and hypothesis H6 is also supported (see Appendix C-2.2.2).

H7: The relationship between consumer trust (TP1-TP14) and your intention to continue buying this product, rather than any alternative (RP8) is mediated by your overall satisfaction with the products (SP6).

***R^2*:** For model 1, SP6 explained 44% of the variance in RP8 (R^2 = 0.440). For model 2, TP1-TP14 fitted to the data to 0.075 (R^2 Change =0.075, p<0.001). Model 1 had an F-ratio of 394.575, p<0.001 with 1 and 502 degrees of freedom, so the variance explained by SP6 was significant. For model 2, the variance explained by TP1-TP14 was significant F-ratio was 34.520, p<0.001 with 15 and 488 degrees of freedom (see Appendix C-2.3.1).

The *b* values for model 1 and model 2 indicated a positive relationship. SP6 was positively related to RP8, and thus it met the condition for mediation. The *b* values for TP1, TP2, TP4, TP8 and TP9 were significantly related to RP8 in the hypotheses testing (H1), and TP1, TP4, TP8, and TP9 were no longer significantly related to RP8 when controlling for the mediation of SP6. Thus, the final model has also been partially met. The beta coefficients showed the most important relationships between predictors and outcome variable in this situation was TP2. The results of t values showed that SP6 (t (488) =10.789, p<0.001) and TP2 (t (488)=3.098, p<0.05) (see Appendix C-2.3.2).

As a result, thirteen independent variables (TP1, TP3-TP14) were rejected while only one independent variable addressing the relationship between TP2 and RP8 was mediated by SP6.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -4.378 to 3.814. Among 34 cases (6.35%), the values of 25 (4.96%) were larger than ±1.96, the values of another six (1.2%) were greater than ±2.58, and the values of another three (0.60%) were higher than ±3.29, which could be a matter of concern. Therefore, the study needed to further test with other statistical tests (see Appendix C-2.3.3). For this study, influential statistics such as Cook's distance and DFBetas were considered.

Influential cases: The 34 cases of this study had Cook's distance significantly less than 1 (Field, 2009). However, for Mahalanobis distance, the study had 34 cases, which was higher than the threshold of 25 (Field, 2009). This indicates that such cases were problematic. All Dfbetas values were less than 2, indicating the model appropriateness (see Appendix C-2.3.4). At the final step though, the regression coefficient was reduced; yet one predictor (TP2) only was significant, indicating a partial mediation of the model. Some independent variables of trust were mediated by SP6 and the other predictors were excluded in the model (Baron and Kenny, 1986). However, the study also employed CVR for calculation in order to confirm the model fit. The results indicated 1.09 <CVR< 0.91 (see formula in Appendix C-2.3.4). All CVR values in Appendix C-2.3.4 were within the acceptable range, meaning that the case had an effect on the variance of the model parameters.

(2) Interpreting the regression variance by generalization

Independent residuals: The Derbin-Watson value of this study was 1.861, less than 2 (see Appendix C-2.3.1). The independents variable in this model were not in error.

Linearity and homoscedasticity: The graph of standardized residuals in Appendix C-2.3.5 presents the dispersion of points while the graph means linearity and homoscedasticity have been met.

Normality distribution: The histogram and normality residuals plots shown in Appendix C-2.3.6 are a normal distribution of this model.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.251-0.566 which were more than 0.2; and VIF values ranged from 1.767-3.990, a distance from 10, meaning that multicollinearity values did not distort the regression model (Hair *et al*., 2010) (see Appendix C-2.3.2).

6.4.3.3 Hypotheses testing for H8-H12

H8: The rationale of expectation (EP1-EP4) has a positive effect on overall consumer intention to continue buying this product, rather than any alternative (RP8).

The independent variables of EP1-EP4 and dependent variables of RP8 correlated (see Appendix C-3.1.1). It was evident that EP3 (0.594), which was the highest positive values with RP8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009). This could offer the best predictor of RP8. Furthermore, other predictors in close relationship were EP1 (0.585), EP4 (0.567) and EP2 (0.556).

The multiple R for this data was 0.652 with R^2 as 0.425, rationale of expectation being accounted for 42.5% of RP8. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) in order to correlate with RP8. Adjusted R^2 =0.420 referred to the level of RP8 being accounted for the regression model. The F-ratio was 92.124, $p<0.001$ with 4 and 499 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-3.1.2).

The results indicated that all b values of EP1-EP4 were in positive relationships with RP8. In addition, the most important of the beta coefficients identified

important relationships between predictors and dependent variables was EP3, followed by EP1, EP4 and EP2, respectively. The results of *t* values showed that EP3 (*t* (499)=4.622, *p*<0.001), EP1 (*t* (499)=3.803, *p*<0.001), TP4 (*t* (499)=2.367, *p*<0.05), EP2 (*t* (499)=2.091, *p*<0.05) (see Appendix C-3.1.3).

As a consequence, all predictors (EP1-EP4) were supported in RP8.

H9: The rationale of satisfaction (SP1-SP5) has a positive effect on the overall consumer intention to continue buying this product, rather than any alternative (RP8).

The independent variables of SP1-SP5 and dependent variables of RP8 correlated (see Appendix C-3.2.1). It was found that SP5 (0.646) had the highest positive values with RP8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009). This could make for the best predictor of RP8. Furthermore, other predictors in close relationship are: SP4 (0.638), SP3, (0.608), SP2 (0.514); and SP1 (0.459), respectively.

The multiple *R* for this data was 0.691, with R^2 at 0.478, accounting for 47.8% of RP8. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with RP8. Adjusted R^2 =0.473 refers to the level of RP8 accounting for the regression model. The *F*-ratio was 91.131, $p<0.001$ with 5 and 498 degrees of freedom. All independent variables were significant at the level below 0.05 of

regression coefficients (p<0.05). These values pointed out the overall of data had a significant fit (see Appendix C-3.2.2).

The *b* values of SP3-SP5 were in positive relationship with RP8. The beta coefficients showed the most important of the relationships between predictors and outcome variables, in this situation was SP5, followed by SP4, and SP3 respectively. The *t* value showed that SP5 (t (498)=5.156 p<0.001), SP4 (t (498)=3.337, p<0.05), and SP3 (t (498)=1.983, p<0.05) (see Appendix C-3.2.3).

Therefore, three items (SP3-SP5) were in a positive relationship in RP8 whereas two items (SP1 and SP2) were rejected.

H10: The rationale of expectation (EP1-EP4) has a positive overall effect on how the products meet the consumers' current expectation (EP5).

The independent variables of EP1-EP4 and dependent variables of EP5 correlated (see Appendix C-3.3.1). It was found that EP4 (0.654) had the highest positive values with RP8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 (p<0.05) (Field, 2009). This could offer the best predictor of EP5. Furthermore, other predictors with a close relationship were EP3 (0.624), EP2, (0.612), and EP1 (0.606), respectively.

The multiple *R* for this data was 0.706 with R^2 as 0.498, accounting for 49.8% of EP5. This variable was significant (p<0.001) at a level less than 0.05 (p<0.05) to

correlate with EP5. Adjusted R^2 =0.494 refers to the level of EP5 being accounted for by the regression model. The *F*-ratio was 123.984, $p<0.001$ with 4 and 499 degrees of freedom. All independent variables were significant at below 0.05 of regression coefficients ($p<0.05$). These values indicated that the overall data were of a significant fit (see Appendix C-3.3.2).

All *b* values of EP1-EP4 had a positive relationship with EP5. In addition, the beta coefficients identified important relationships between predictors. Among the most important were EP4, EP3, followed by EP1 and EP2. The results of *t* values showed that EP4 (t (499)=5.312, $p<0.001$), EP3 (t (499)=3.964, $p<0.001$), EP1 (t (499)=2.788, $p<0.05$), EP2 (t (499)=2.747, $p<0.05$) (see Appendix C-3.3.3).

In sum, all independent variables (EP1-EP4) were supported, with a positive relationship with EP5.

H11: The rationale of satisfaction (SP1-SP5) has a positive effect on the overall consumer satisfaction with the product (SP6).

The independent variables of SP1-SP5 and the dependent variables of SP6 correlated (see Appendix C-3.4.1). It was discovered that SP5 (0.824) had the highest positive value with SP6. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which offered the best predictor of SP6. Furthermore, other predictors with a close relationship included: SP4 (0.783), SP3 (0.780), SP2 (0.614), and SP1 (0.541), respectively.

The multiple R for this data was 0.868 with R^2 as 0.753, the rationale of satisfaction accounted for 75.3% of SP6. This variable was significant ($p<0.001$) at a level less than 0.05 ($p<0.05$) to correlate with SP6. Adjusted R^2 =0.750 referred to the level of SP6 being accounted for by the regression model. The F-ratio was 302.988, $p<0.001$ with 5 and 498 degrees of freedom. All independent variables became significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-3.4.2).

The results showed that b values of SP3, SP4, and SP5 had a positive relationship with SP6. In addition, the beta coefficients revealed important relationships between predictors. The most important ones included SP5, SP3, and SP4. In this study, the results of t values showed that SP5 (t (498)=10.864, $p<0.001$), SP3 (t (498)=6.151, $p<0.001$) SP4 (t (498)=4.015, $p<0.001$), (see Appendix C-3.4.3).

Therefore, three independent variables of rationale of satisfaction (SP3, SP4, and SP5) had a positive relationship with SP6 and two independent variables (SP1 and SP2) were rejected.

H12: The rationale of repurchase intentions (RP1-RP7) has a positive effect on the overall intention to continue buying this product, rather than any alternative (RP8).

The independent variables of RP1-RP7 and dependent variable of RP8 correlated (see Appendix C-3.5.1). It was discovered that RP7 (0.669) had the highest positive value with RP8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which seemed to offer the best predictor of RP8. Furthermore, other predictors with a close relationship included: RP5 (0.656), RP1 (0.635), and RP4 (0.603).

The multiple R for this data was 0.784 with R^2 as 0.615, rationale of repurchase accounted for 61.5% of RP8. This variable was significant ($p<0.001$) at a level less than 0.05 ($p<0.05$) to correlate with RP8. Adjusted R^2 =0.609 refers to the level of RP8 being accounted for by the regression model. The F-ratio was 113.105, $p<0.001$ with 7 and 496 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-3.5.2).

All b values were in positive relationship with RP8. The beta coefficients showed the most important of the relationships between predictors and outcome variables were RP7, RP1, RP4, and RP5. The results of t values showed that RP7 (t (496)=7.993, $p<0.001$), RP4 (t (496)=5.206, $p<0.001$), RP1 (t (496)=4.403, $p<0.001$), and RP5 (t (496)=3.952, $p<0.001$) (see Appendix C-3.5.3).

As a result, four predictors (RP1, RP4, RP5, and RP7) were supported, with a positive relationship with RP8, while three predictors (RP2, RP3, and RP6) were rejected.

6.4.4 Hypothesis testing in regression analysis for consumers' brand perspective

For the consumers' brand perspective, the study attempts to test the hypothesis relationship between brand trust, brand experience, expectation, satisfaction, overall consumer expectation, the overall consumer satisfaction, and specifically repurchase. Table 6.35 illustrates independent and dependent variables of consumers' brand perspective: the independent variables consist of eight sub-scale items of brand trust (BTB1-BEB8), twelve sub-scale items of brand experience (BEB1-BEB12), four sub-scale items of expectation (EB1-EB4), five sub-scale items of satisfaction (SB1-SB5), and seven sub-scale items of repurchase (RB1-RB7). There were three dependent variables: overall, this brand meets your current expectation (EB5); overall, you are so satisfied with this brand (SB6); and the overall consumer intention to continue buying this brand, rather than any alternative (RB8). However, the study needs to find out about the mediators of the relationship between independent and dependent variables. Thus, there are two mediators: overall, this brand meets your current expectation (EB5); and overall, you are so satisfied with this brand (SB6).

Table 6.35 Items of consumers' brand perspective

Variable	Independent variables	Symbol
Brand trust	This brand meets your expectations.	BTB1
	You feel confidence in this brand.	BTB2
	This brand never disappoints you.	BTB3
	This brand guarantees my satisfaction.	BTB4
	This is an honest and sincere brand	BTB5
	You could rely on this brand for problem solving.	BTB6
	This brand would make any effort to make you be satisfied.	BTB7
	This brand would compensate you if any problem with this product occurs.	BTB8
Brand experience	You find this brand interesting in a sensory way.	BEB1
	This brand makes a strong impression on your visual sense or other senses.	BEB2
	This brand appeals to your senses.	BEB3
	This brand induces feelings and sentiments.	BEB4
	You feel great using this brand.	BEB5
	This brand is an emotional brand.	BEB6
	This brand stimulates your curiosity and problem-solving.	BEB7
	This brand does not make you consider much.	BEB8
	You are engaged in a lot of thinking when you encounter this brand.	BEB9
	This brand results in bodily experience.	BEB10
	Your body is revitalised when you have consumed this brand.	BEB11
	You have recognised this brand.	BEB12
Expectation	This brand provides the dietary supplements level that you want to be offered.	EB1
	Your needs and wants are fulfilled by this brand.	EB2
	This brand provides benefits corresponding to its price.	EB3
	Your expectations are higher than before consuming this brand.	EB4
Satisfaction	You are so satisfied with this brand that you will recommend it to family, friends, and colleagues.	SB1
	Providing unexpected performance sometimes impresses you deeply and you are so satisfied	SB2
	It is the correct decision to purchase this brand.	SB3
	You are satisfied information content with this brand.	SB4
	You are satisfied with the quality of this brand.	SB5
Repurchase Intention	This brand has a good performance and quality.	RP1
	This brand makes you feel healthier.	RP2
	This brand fulfils your needs.	RP3
	This brand has a reasonable price.	RP4
	You have faith in this brand.	RP5
	This brand is convenient to buy.	RP6
	This brand can solve your problems/concerns.	RP7
	Mediators and dependent variables	
Expectation	Overall, this brand meets your overall current expectation.	EB5
Satisfaction	Overall, you are so satisfied with this brand	SB6
	Dependent variable	
Repurchase intention	Overall intention to continue buying this brand, rather than any alternative.	RB8

Source: Researcher's fieldwork

The hypothesis relationship of consumers' brand perspective is classified in Table 6.36.

Table 6.36 Hypothesis testing of consumers' brand perspective

	Hypotheses
H13	Brand trust (BTB1-BTB8) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).
H14	Brand trust (BTB1-BTB8) has a positive effect on how this brand meets the overall current expectation (EB5).
H15	How this brand meets the overall current expectation (EB5) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).
H16	The relationship between brand trust (BTB1-BTB8) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by how this brand meets the overall current expectation (EB5).
H17	Brand trust (BTB1-BTB8) has a positive effect on the overall consumer satisfaction with the brand (SB6).
H18	The overall consumer satisfaction with the brand (SB6) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).
H19	The relationship between brand trust (BTB1-BTB8) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by the overall satisfaction with the brand (SB6).
H20	Brand experience (BEB1-BEB12) has a positive effect on the overall consumer intention to continue buying this brand, rather than any alternative (RB8).
H21	Brand experience (BEB1-BEB12) has a positive effect on how this brand meets the overall current expectation (EB5).
H22	The relationship between brand experience (BEB1-BEB12) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by how this brand meets the overall current expectation (EB5).
H23	Brand experience (BEB1-BEB12) has a positive effect on the overall satisfaction with the brand (SB6).
H24	The relationship between brand experience (BEB1-BEB12) and the overall consumer intention to continue buying this brand, rather than any alternative (RB8), is mediated by the overall satisfaction with the brand (SB6).
H25	The rationale of expectation (EB1-EB4) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).
H26	The rationale of satisfaction (SB1-SB5) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).
H27	The rationale of expectation (EB1-EB4) has a positive effect on how this brand meets your overall current expectation (EB5).
H28	The rationale of satisfaction (SB1-SB5) has a positive effect on the overall satisfaction with the brand (SB6).
H29	The rationale of repurchase (RB1-RB7) has a positive effect on the overall intention to continue buying this product, rather than any alternative (RB8).

6.4.4.1 Hypothesis testing for H13-H16

H13: Brand trust (BTB1-BTB8) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).

The independent variables of BTB1-BTB8 and dependent variables of RB8 correlated (see Appendix C-4.1.1). It was obvious that BTB8 (0.616) has the highest positive values with RB8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 (p<0.05) (Field, 2009), which tended to be best predictor of RB8. Furthermore, other predictors with a close relationship included BTB4 (0.596), BTB2 (0.591), BTB3 (0.588); and BTB5 (0.567).

The multiple R for this data was 0.711 while R^2 was 0.506. Trust was accounted for 50.6% of RB8. This variable was significant (p<0.001) at the value less than 0.05 (p<0.05) to correlate with RB8. Adjusted R^2 =0.498 represents the level of RB8 being accounted for the regression model. The F-ratio was 63.424, p<0.001 with 8 and 495 degrees of freedom. All independent variables were significant at the value less than 0.05 of regression coefficients (p<0.05). These values indicated the overall data had a significant fit (see Appendix C-4.1.2).

The b values revealed that all predictors of BTB1-BTB8 had a positive relationship with RB8. Besides, the beta coefficients display important relationships between predictors and outcome variables, including BTB8,

followed by BTB2, BTB7, BTB4, and BTB3, respectively. The results of *t* values from high to low values: BTB8 (*t* (495)=4.156, $p<0.001$), BTB2 (*t* (495)=3.464, $p<0.05$), BTB4 (*t* (495)=2.776, $p<0.05$), and BTB7 (*t* (495)=2.472, $p<0.05$) respectively (see Appendix C-4.1.3).

As a result, four predictors (BTB1, BTB3, BTB5, and BTB6) were rejected while four predictors (BTB2, BTB4, BTB7, and BTB8) had a positive relationship with RB8.

H14: Brand trust (BTB1-BTB8) has a positive effect on how this brand meets the overall current expectation (EB5).

The independent variables of BTB1-BTB8 and dependent variable of EB5 correlated (see Appendix C-4.2.1). The highest positive values with EB5, verified by a significant value less than 0.05 ($p<0.05$) included: BTB1 (0.631) and BTB7 (0.631). Both were correlation values and partial correlation values, which tended to be best predictor of EB5. Other variables were BTB5 (0.595), BTB2 (0.583), BTB3 (0.583), and BTB4, (0.575), respectively.

The multiple *R* for this data was 0.727 while R^2 was 0.529. Brand trust accounted for 52.9% of EB5. These variables were significant ($p<0.001$) at the value less than 0.05 ($p<0.05$) to correlate with EB5. Adjusted R^2 =0.521 represents the level of EB5 being accounted for by the regression model. The *F*-ratio was 69.439, $p<0.001$ with 8 and 495 degrees of freedom. All independent variables were

significant at the level below 0.05 of regression coefficients (p<0.05). These values indicated that the overall data had a significant fit (see Appendix C-4.2.2).

The *b* values showed that all predictors of BTB1-BTB8 were in a positive relationship with EB5. Besides, the most important of the beta coefficients between predictors and outcome variables was BTB1, followed by BTB7, BTB5, and BTB8. The results of *t* values showed that BTB1 (t (495)=5.775, p<0.001), BTB5 (t (495)=3.043, p<0.05), BTB7 (t (495)=2.835, p<0.05), BTB8 (t (495)=2.205, p<0.05) (see Appendix C-4.2.3).

As a consequence, four independent variables (BTB2, BTB3, BTB4, and BTB6) were rejected while four independent variables (BTB1, BTB5, BTB7, and BTB8) had a positive relationship with EB5.

H15: How this brand meets the overall current expectation (EB5) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).

Multiple R had a value of 0.641, which referred to the simple correlation between EB5 and RB8. The value of R^2 was 0.411, which meant EB5 accounted for 41.1% of variation in RB8. The value of *F*-ratio was 349.957, which was significant at p<0.001. Thus the regression model overall predicts RB8 well (see Appendix C-4.3.1). Furthermore, *b* value of EB5 was 0.627, being different from 0 and having

a significantly level at $p<0.001$. In other words, EB5 significantly contributed to RB8 (see Appendix C-4.3.2) while hypothesis H15 is also supported.

H16: The relationship between brand trust (BTB1-BTB8) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by how this brand meets the overall current expectation (EB5).

The model summary was successful in predicting a mediated regression analysis of the final model of the relationship between brand trust and the overall intention to continue buying this brand, rather than any alternative. For model 1, EB5 explains 41.1% of the variance in RB8 (R^2 = 0.411). For model 2, BTB1-BTB8 was fitted to the data to 0.135 (R^2 Change =0.135, $p<0.001$). Model 1 had an *F*-ratio of 349.957, $p<0.001$ with 1 and 502 degrees of freedom. This meant that the variance explained by EB5 was significant. For model 2, the variance explained by BTB1-BTB8 was significant. The *F*-ratio is 65.980, $p<0.001$ with 9 and 494 degrees of freedom (see Appendix C-4.4.1).

The *b* values of model 1 were in a positive relationship, while model 2, *b* values were of both positive and negative relationships. However, EB5 was positively significantly related to RB8, and therefore it met the condition for mediation whereas the *b* values for BTB2, BTB4, and BTB8 were significantly related to RB8 in the hypotheses testing (H13). At the stage, BTB7 was no longer significantly related to RB8 when testing the mediation of EB5. Thus, the final model has also been partially met. The beta coefficients showed the most

important of the relationships between predictors and outcome variables in this situation was EB5, followed by BTB8, BTB2, and BTB4, respectively. The results of *t* values showed that EB5 (*t* (494)=6.572, *p*<0.001), BTB8 (*t* (494)=3.660, *p*<0.001), BTB2 (*t* (494)=3.254, *p*<0.05) and BTB4 (*t* (494)=2.732, *p*<0.05) respectively (see Appendix C-4.4.2).

As a result, five components (BTB1, BTB3, BTB5, BTB6, and BTB7) were rejected while three components (BTB2, BTB4, and BTB8) were supported.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -5.009 to 3.792. There were 24 cases (4.76%). The values for 14 cases (2.77%) were larger than ±1.96. The values of six cases (1.20%) were greater than ±2.58 and the values of four cases (0.80%) were higher than ±3.29, which may be cause for concern. Therefore, the study needs to test further with other statistical tests (see Appendix C-4.4.3). Such influential cases statistics as Cook's distance, Mahalanobis distance, and DFBetas were considered.

Influential cases: The 24 cases of this study had Cook's distance significantly less than 1. According to Mahalanobis distance, the study, with the respondent of 504, has 24 cases, which was not higher than the threshold of 25 (Field, 2009) so the model was appropriated. All DFBetas values were less than 2, meaning the model was appropriate (see Appendix C-4.4.4).

(2) Interpreting the regression model by generalization

Independent residuals: The Derbin-Watson value of this study was 1.807, which was less than 2 (see Appendix C-4.4.1). The independent variables in this model were a good fit.

Linearity and homoscedasticity: The graph of standardized residuals shown in Appendix C-4.4.5 presents that the dispersion of points and the graph shows that the linearity and homoscedasticity have been met.

Normality distribution: The histogram and normality residuals plots shown in Appendix C-4.4.6 show a normal distribution of this model.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.316-0.479, which were more than 0.2. The VIF values ranged from 2.122-3.164, which were distant from 10, these mean that multicollinearity values did not distort the regression model (Hair *et al*., 2010) (see Appendix C-4.4.2).

6.4.4.2 Hypotheses testing for H17-H19

H17: Brand trust (BTB1-BTB8) has a positive effect on the overall consumer satisfaction with the brand (SB6).

The independent variables of BTB1-BTB8 and dependent variable of SB6 correlated (see Appendix C-5.1.1). That is, BTB7 (0.668) had the highest positive

values with SB6. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of SB6. Furthermore, other predictors with high relationship included BTB5 (0.637), BTB2 (0.631), BTB4 (0.615) and BTB3 (0.613) respectively.

The multiple R for this data was 0.764 while R^2 was 0.583. Brand trust accounted for 58.3% of the overall consumer satisfaction with the brand (SB6). This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with SB6. Adjusted R^2 =0.576 represents the level of SB6 being accounted for by the regression model. The results revealed that the model had an F-ratio 86.543 $p<0.001$ with 8 and 495 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data have a significant fit (see Appendix C-5.1.2).

The results of b values showed that all predictors of brand trust (BTB1-BTB8) were in a positive relationship with SB6. The beta coefficients showed important relationships between predictors and dependent variables. That is, BTB7, BTB8, BTB2, BTB1, and BTB5 respectively. T-test statistic results were as follows: BTB8 (t (495)=4.316, $p<0.001$), BTB2 (t (495)=3.377, $p<0.05$), BTB7 (t (495)=3.115, $p<0.05$), BTB1 (t (495)=3.082, $p<0.05$), and BTB5, (t (495)=3.073, $p<0.05$), (see Appendix C-5.1.3).

As a consequence, three items (BTB3, BTB4, and BTB6) were rejected while five items (BTB1, BTB2, BTB5, BTB7, and BTB8) were supported.

H18: The overall consumer satisfaction with the brand (SB6) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).

Multiple R had a value of 0.749, which refers to the simple correlation between SB6 and RB8. The value of R^2 was 0.561, in which SB6 accounted for 56.1% of variation in RB8. The value of *F*-ratio was 642.543, which was significantly good. The regression model overall predicts RB8 at $p<0.001$ (see Appendix C-5.2.1). Furthermore, the *b* value of SB6 was 0.734, different from 0 and had a significant level at $p<0.001$. This meant that SB6 significantly contributes to RB8 (see Appendix C- 5.2.2), and hypothesis H18 was also supported.

H19: The relationship between brand trust (BTB1-BTB8) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by the overall satisfaction with the brand (SB6).

Overall model fit: The model summary was successful in predicting a mediated regression analysis of the final model of the relationship between brand trust and the overall intention to continue buying this product, rather than any alternative, is mediated by the overall satisfaction with the brand.

***R*²:** At the model 1, SB6 explains 56.1% of the variance in RB8 (R^2 = 0.561). At the model 2, BTB1-BTB8 was fitted to the data to 0.050 (R^2 Change =0.050, p<0.001). The results revealed that model 1 had an *F*-ratio of 642.543, p<0.001 with 1 and 502 degrees of freedom, meaning the variance explained by SB6 was significant. For model 2, the variance explained by BTB1-BTB8 was significant when the *F*-ratio was 86.280, p<0.001 with 9 and 494 degrees of freedom (see Appendix C-5.3.1).

The results of model 1 and model 2 indicated that *b* values of both models were of a positive relationship. SB6 was positively significant related to RB8, and thus it met the condition for mediation whereas the *b* values for BTB2, BTB4, BTB7, and BTB8 were significantly related to RB8 in the hypothesis testing (H13). BTB7 was no longer significantly related to RB8 when controlling the mediation of SB6. Thus, the final model has also partially been met. The beta coefficients showed the most important of the relationships between predictors and outcome variables were SB6, BTB4, BTB2, and BTB8, respectively. T-test statistic results were the following: SB6 (t (494)=11.550, p<0.001), BTB8 (t (494)=2.394, p<0.05), BTB4 (t (494)=2.388, p<0.05), and BTB2 (t (494)=2.123, p<0.001), respectively (see Appendix C-5.3.2).

As a result, five independent variables (BTB1, BTB3, BTB5, BTB6, and BTB7) were rejected while three independent variables (BTB2, BTB4, and BTB8) were in a positive relationship with RB8.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -4.382 to 2.919. There were 25 cases (4.96%), in which the values of 10 (1.98%) were over than ±1.96, the values of another 12 cases (2.38%) were greater than ±2.58, and the values of the other three cases (0.60%) were higher than ±3.29, which may be a matter of concern. Therefore, the study needs to test further with other statistical tests (see Appendix C-5.3.3). For this study, influential cases statistics such as Cook's distance, Mahalanobis distance, and DFBetas were considered.

Influential cases: The 25 cases of this study had Cook's distance significantly less than 1. According to Mahalanobis distance, the number of research was 504 generating 25 cases so it was not higher than the threshold (Field, 2009), meaning the model was appropriate. All DFBetas values were less than 2, indicating that the model was fit (see Appendix C-5.3.4).

(2) Interpreting the regression model by generalization

Independent residuals: The Derbin-Watson value of this study was 1.869, which was below than 2 (see Appendix C-5.3.1) so the independent variables in this model were fit.

Linearity and homoscedasticity: The graph of standardized residuals in Appendix C-5.3.5 presents the dispersion of points while the graph shows that linearity and homoscedasticity have been met.

Normality distribution: The histogram and normality residuals plots shown in Appendix C-5.3.6 were a normal distribution of this model.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.315-0.466, which were more than 0.2 while VIF values ranged from 2.145-3.174, which were distant from 10 (see Appendix C-5.3.2). This indicates that multicollinearity values did not distort the regression model (Hair *et al*., 2010).

6.4.4.3 Hypotheses testing for H20-H22

H20: Brand experience (BEB1-BEB12) has a positive effect on the overall consumer intention to continue buying this brand, rather than any alternative (RB8).

The independent variables of BEB1-BEB12 and dependent variable of RB8 correlated (see Appendix C-6.1.1). It was visible that BEB11 (0.662) is the highest positive values with RB8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be best predictor of RB8. Furthermore, other predictors with a

close relationship included: BEB12 (0.618), BEB8 (0.612), BEB9, (0.599) and BEB1 (0.533), respectively.

The multiple *R* for this data was 0.732 while R^2 was 0.536. That is, brand experience accounted for 53.6% of RB8. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with RB8. Adjusted R^2 =0.525 represents the level of RB8 being accounted for by the regression model. The *F*-ratio was 47.311, $p<0.001$ with 12 and 491 degrees of freedom. All twelve independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-6.1.2).

The *b* values found that two predictors BEB6 and BEB7 had a negative relationship while ten predictors (BEB1-BEB5; BEB8-BEB12) had a positive one with RB8. The beta coefficients of BEB11, BEB8, BEB4, and BEB5 respectively revealed important relationships between predictors and outcome variables. The *t* values revealed the largest value with a significant $p<0.001$ was BEB11 (t (491)=5.924, $p<0.001$), followed by BEB8 (t (491)=4.001, $p<0.001$), BEB4 (t (491)=2.173, $p<0.05$), and BEB5 (t (491)=2.083, $p<0.05$), respectively (see Appendix C-6.1.3).

Consequently, eight independent variables (BEB1, BEB2, BEB3, BEB6, BEB7, BEB9, BEB10, BEB12) were rejected while four independent variables (BEB4, BEB5, BEB8, and BEB11) had a positive effect on RB8.

H21: Brand experience (BEB1-BEB12) has a positive effect on how this brand meets the overall current expectation (EB5).

The independent variables of BEB1-BEB12 and dependent variable of EB5 correlated (see Appendix C-6.2.1). It was found that BEB12 (0.574) has the highest positive value with EB5. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be best predictor of EB5. Furthermore, other predictors with high relationship included: BEB11 (0.557) BEB8 (0.550), BEB9 (0.526), and BEB5 (0.511), respectively.

The multiple R for this data was 0.667 while R^2 was 0.445. Brand experience accounted for 44.5% of EB5. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with EB5. Adjusted R^2 =0.431 representing the level of EB5 was accounted for by the regression model. The F-ratio was 32.748, $p<0.001$ with 12 and 491 degrees of freedom. All twelve independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-6.2.2).

The b values revealed that one predictor (BEB6) had a negative relationship, and four predictors (BEB5, BEB8, BEB11, and BEB12) had a positive relationship with EB5. In addition, the beta coefficients were important relationships between predictors, that is, BEB8, BEB12, BEB11, BEB5, and BEB6. T-test statistics were the following: BEB8 (t (491)=3.352, $p<0.05$), BEB11 (t (491)=3.033, $p<0.05$),

BEB5 (t (491)=2.784, p<0.05), and BEB12 (t (491)=2.981, p<0.05) (see Appendix C-6.2.3).

Therefore, seven independent variables were rejected, while four independent variables had a positive effect on EB5. Only BEB6 had a negative relationship with EB5, which contradicted with the current hypothesis which indicates that this brand is an emotional brand and has a positive effect on how this brand meets your current expectation overall. Therefore, BEB6 was not accepted.

H22: The relationship between brand experience (BEB1-BEB12) and the overall intention to continue buying this brand, rather than any alternative (RB8), is mediated by how this brand meets the overall current expectation (EB5).

Overall model fit: The model summary was successful in predicting a mediated regression analysis of the final model of the relationship between brand experience and the overall intention to continue buying this brand, rather than any alternative, being mediated by how this brand meets your overall current expectation. For model 1, EB5 explains 41.1% of the variance in RB8 (R^2 = 0.411). For model 2, BEB1-BEB12 was fitted to the data to 0.176 (R^2 Change =0.176, p<0.001). The results revealed that the model 1 F-ratio was 349.957, p<0.001 with 1 and 502 degrees of freedom. This indicated that the variance explained by EB5 was significant. For model 2, the variance explained by BEB1-

BEB12 was significant. *F*-ratio was 53.431, $p<0.001$ with 13 and 490 degrees of freedom (see Appendix C-6.3.1).

The *b* values of model 1 was in positive relationship, while model 2, *b* values are both positive and negative, EB5 is significantly related to RB8, and therefore, it met the condition for mediation. The two predictors (BEB8 and BEB11) had a positive relationship and one predictor (BEB7) had a negative relationship. Whereas, the *b* values for BEB4, BEB5, BEB8, and BEB11 are significantly related to RB8 in the hypotheses testing (H20), there were now BTB4 and BEB5 were no longer significant related to RB8 when controlling the mediation of EB5. Thus, the final model has also been partially met The beta coefficients show that of the important relationships between predictors, in this situation, the most important was EB5, followed by BEB11, and BEB8, respectively. The *t* values from high to low values: EB5 (t (490)=7.706, $p<0.001$), BEB11 (t (490)=5.164, $p<0.001$), and BEB8 (t (490)=3.032, $p<0.05$), respectively (see Appendix C-6.3.2).

Therefore, nine independent variables were rejected while two independent variables had a positive relationship. Only one predictor (BEB7) had a negative relationship with RB8 mediated by EB5, which contradicted with the hypothesis testing, meaning this result was rejected.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -6.131 to 4.455. There were 20 cases (3.96%). Among them, the values of nine cases (1.78%) were over ±1.96; the values of another eight cases (1.58%) were greater than ±2.58; and the values of the remaining three cases (0.60%) were higher than ±3.29, which may be a matter of concern. Therefore, the study needs to test further with other statistical tests (see Appendix C-6.3.3). For this study, influential cases statistics such as Cook's distance, Mahalanobis distance, and DFBetas were considered.

Influential cases: The 20 cases of this study had Cook's distance significantly less than 1. According to Mahalanobis distance, the 504 respondents generated 20 cases, which was not higher than the threshold of 25 (Field, 2009) so the model was fit. All DFBetas values were less than 2, meaning the model was appropriate (see Appendix C-6.3.4).

(2) Interpreting the regression model by generalization

Independent residuals: The Derbin-Watson value of this study was 1.684, which was less than 2 (see Appendix C-6.3.1). The independent variables in this model were fit.

Linearity and homoscedasticity: The graph of standardized residuals in Appendix C-6.3.5 revealed the dispersion of points. The graph shows that linearity and homoscedasticity have been met.

Normality distribution: The histogram and normality residuals plots in Appendix C-6.3.6 were a normal distribution.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.293-0.555 that were more than 0.2 and VIF values ranged from 1.800-3.414 which were distant from 10 (see Appendix C-6.3.2), meaning that multicollinearity values did not distort the regression model (Hair *et al*., 2010).

6.4.4.4 Hypotheses testing for H23 and H24

H23: Brand experience (BEB1-BEB12) has a positive effect on the overall satisfaction with the brand (SB6).

The independent variables of BEB1-BEB12 and dependent variable of SB6 correrated (see Appendix C-7.1.1). It was visible that BEB12 (0.657) was the highest positive values with SB6. Both correlation values and partial correlation values were verified by a significant value less than 0.05 (p<0.05) (Field, 2009), which tended to be the best predictor of RB8. Furthermore, other predictors with a close relationship included: BEB11 (0.632), BEB8 (0.599), BEB9 (0.582), and BEB5 (0.546).

The multiple R for this data was 0.740 while R^2 was 0.547. Brand experience accounted for 54.7% of SB6. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with SB6. Adjusted R^2 =0.536 represents the level of SB6 being accounted for by the regression model. The model F-ratio was 49.488, $p<0.001$ with 12 and 491 degrees of freedom. All independent variables were significant at the level less than 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data were of a significant fit (see Appendix C-7.1.2).

The b values revealed that three predictors (BEB6 and BEB7 and BEB10) had a negative relationship, and nine predictors (BEB1-BEB5, BEB8, BEB9, BEB11 and BEB12) were in a positive relationship with SB6. Besides, the beta coefficients indicated that the highest value with important relationships between predictors and outcome variables included BEB12, BEB8, BEB11, BEB5, BEB1, and BEB2, respectively. T values revealed that BEB12 (t (491)=5.924, $p<0.001$) was the highest significant, followed by BEB11 (t (491)=3.553, $p<0.001$), BEB8 (t (491)=3.512, $p<0.001$), BEB5 (t (491)=2.488, $p<0.05$), BEB1 (t (491)=2.243, $p<0.05$), and BEB2 (t (491)=2.223, $p<0.05$) (see Appendix C-7.1.3).

As a result, six independent variables (BEB3, BEB4, BEB6, BEB7, BEB9 and BEB10) were rejected while six independent variables (BEB1, BEB2, BEB5, BEB8, BEB11 and BEB12) were supported.

H24: The relationship between brand experience (BEB1-BEB12) and the overall consumer intention to continue buying this brand, rather than any alternative (RB8), is mediated by the overall satisfaction with the brand (SB6).

Overall model fit: The model summary was successful in predicting a mediated regression analysis of the final model of the relationship between brand experience and the overall intention to continue buying this brand, rather than any alternative, being mediated by the overall satisfaction with the brand. For model 1, SB6 explains 56.1% of the variance in RB8 (R^2 = 0.561). For model 2, BEB1-BEB12 was fitted to the data to 0.081 (R^2 Change =0.081, p<0.001). The results revealed that the model 1 F-ratio was 642.543, p<0.001 with 1 and 502 degrees of freedom. This meant that the variance explained by SB6 was significant. For model 2, the variance explained by BEB1-BEB12 was significant F-ratio is 67.669, p<0.001 with 13 and 490 degrees of freedom (see Appendix C-7.2.1).

The *b* values of model 1 were in a positive relationship while for model 2, *b* values were both positive and negative. SB6 was significantly related to RB8, and it thus met the condition for mediation. Three predictors (BEB4, BEB8 and BEB11) had a positive relationship with the overall consumer intention to continue buying this brand, rather than any alternative, being mediated by the overall satisfaction with the brand. The *b* values for BEB4, BEB5, BEB8, and BEB11 were significantly related to RB8 in the hypothesis testing (H20). BEB5 was no longer significantly related to RB8 when controlling the mediation of SB6.

The final model has also been partially met. The beta coefficients indicate important relationships between predictors. The most important was the overall consumer satisfaction with the brand (SB6), followed by BEB11, BEB8, and BEB4, respectively. The highest *t* value were as follows: SB6 (*t* (490)=12.050, $p<0.001$), BEB11 (*t* (490)=4.757, $p<0.001$), BEB8 (*t* (490)=2.608, $p<0.05$), and BEB4 (*t* (490=2.107, $p<0.05$), respectively (see Appendix C-7.2.2).

Thus, nine independent variables were rejected while three predictor variables had a positive relationship with RB8, mediated by SB6. This data is summarised in Table 6.55.

(1) Estimating and assessing the regression model by diagnostics

Outliers and residuals: The standard residuals of this study ranged from -5.361 to 3.409. There were 22 cases (4.37%). Among them, the values of 12 cases (2.38%) lay between ±1.96; the values of another five cases (1.00%) were greater than ±2.58; and the values of the other five cases (1.00%) were higher than ±3.29, which may be a matter of concern. Therefore, the study needs to test further with other statistical tests (see Appendix C-7.2.3). Influential cases statistics such as Cook's distance, Mahalanobis distance, and DFBetas were chosen.

Influential cases: The 22 cases of this study had Cook's distance significantly less than 1. According to Mahalanobis distance, the study with 504 respondents generating 22 cases, which were still below the threshold of 25 (Field, 2009) so

the model was fit. All DFBetas values are less than 2, meaning the model was appropriate (see Appendix C-7.2.4).

(2) Interpreting the regression model by generalization

Independent residuals: The Derbin-Watson value of this study was 1.789, which was less than 2 (see Appendix C-7.2.1). The independent variables in this model were fit.

Linearity and homoscedasticity: The graph of standardized residuals was shown in Appendix C-7.2.5 presents that dispersion of points. The graph indicated that the linearity and homoscedasticity had been met.

Normality distribution: The histogram and normality residuals plots shown in Appendix C-7.2.6 were a normal distribution of this model.

The degree and impact of multicollinearity: In this case, the tolerance values ranged from 0.293-0.453, which were over 0.2. The VIF values ranged from 2.209-3.414 which were distant from 10 (see Appendix C-7.2.2), meaning that multicollinearity values did not distort the regression model (Hair *et al*., 2010).

6.4.4.5 Hypothesis testing for H25-H29

H25: The rationale of expectation (EB1-EB4) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).

The independent variables of EB1-EB4 and dependent variable of RB8 correlated (see Appendix C-8.1.1). It was noticeable that EB4 (0.641) was the highest positive value with RB8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of RB8. Furthermore, other predictors with a close relationship included, BEB3 (0.628), BEB2 (0.570), and BEB1 (0.547), respectively.

The multiple R for this data was 0.692 while R^2 was 0.479. Expectation was accounted for 47.9% of RB8. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with RB8. Adjusted R^2 =0.474 referred to the level of RB8 being accounted for the regression model. The F-ratio was 114.466 $p<0.001$ with 4 and 499 degree of freedom. All five predictors were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-8.1.2).

The results in Appendix C-8.1.3 showed that all b values were positive relationships for EB1, EB2, EB3, and EB4 with RB8. In addition, the beta

coefficients illustrated the importance of relationships between predictors and outcome variables. The most important ones included EB4 and EB3. T-test statistic results were EB3 (t (499)=6.049, p<0.001) and EB4 (t (499)=5.557, p<0.001) (see Appendix C-8.1.3).

As a result, two independent variables (EB1 and EB2) were rejected while two predictors were supported (EB3 and EB4).

H26: The rationale of satisfaction (SB1-SB5) has a positive effect on the overall intention to continue buying this brand, rather than any alternative (RB8).

The independent variables of (SB1-SB5) and dependent variable of RB8 correlated (see Appendix C-8.2.1). It was obvious that SB5 (0.669) was the highest positive value with RB8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 (p<0.05) (Field, 2009), which tended to be the best predictor of RB8. Furthermore, other predictors with a close relationship included: SB4 (0.650), SB2 (0.597), SB3, (0.667) and SB1 (0.593), respectively.

The multiple R for this data was 0.727, R^2 was 0.529. Satisfaction accounted for 52.9% of RB8. This variable was significant (p<0.001) at the level less than 0.05 (p<0.05) to correlate with RB8. Adjusted R^2 =0.524 referred to the level of RB8

being accounted for by the regression model. The model *F*-ratio was 111.804, $p<0.001$ with 5 and 498 degrees of freedom. All five independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data had a significant fit (see Appendix C-8.2.2).

The results showed that all *b* values of SB1-SB5 were in positive relationships with RB8. In addition, the beta coefficients of SB5, SB3, SB1, SB4 and SB2, respectively identified important relationships between predictors and outcome variables. T-test statistic findings were the following: SB5 (t (498)=4.832 $p<0.001$), SB3 (t (498)=4.438, $p<0.001$), SB1 (t (498)=2.773, $p<0.05$), and SB4 (t (498)=1.997, $p<0.001$) (see Appendix C-8.2.3).

Consequently, four predictors (SB1, SB3, SB4 and SB5) were supported while one predictor (SB2) was rejected.

H27: The rationale of expectation (EB1-EB4) has a positive effect on how this brand meets your overall current expectation (EB5).

The independent variables of EB1-EB4 and dependent variable of EB5 correlated (see Appendix C-8.3.1). It was found that EB1 (0.674) was the highest positive value with RP8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of EB5. Furthermore, other predictors with a close relationship included EB4 (0.669), EB2 (0.664), and EB3 (0.649), respectively.

The multiple *R* for this data was 0.758 while R^2 was 0.574. The rationale of expectation was accounted for 57.4% of EB5. This variable was significantly (p<0.001) at the level less than 0.05 (p<0.05) to correlate with EB5. Adjusted R^2 =0.571 represents the level of EB5 was accounted for by the regression model. The *F*-ratio was 168.231, p<0.001 with 4 and 499 degree of freedom. All independent variables were significant at the level below 0.001 of regression coefficients (p<0.05). These values pointed out that the overall data had a significant fit (see Appendix C-8.3.2).

The results revealed that all *b* values of EB1- EB4 were in positive relationships with EB5. In addition, the beta coefficients illustrated important relationships between predictors and dependent variables. That is, EB1 was the highest value, followed by EB2, EB3, and EB4, respectively. T-test statistic findings were as follows: EB1 (t (499)=5.856, p<0.001), EB3 (t (499)=4.663, p<0.001), EB2 (t (499)=4.199, p<0.05), and EB4 (t (499)=3.799, p<0.05) (see Appendix C-8.3.3).

Therefore, all independent variables were supported by a positive relationship with EB5.

H28: The rationale of satisfaction (SB1-SB5) has a positive effect on the overall satisfaction with the brand (SB6).

The correlation between independent variables of SB1-SB5 and dependent variable of SB6 was confirmed (see Appendix C-8.4.1). It was obvious that SB5

(0.846) was the highest positive value with SB6. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of SB6. Furthermore, other predictors with a close relationship included: SB4 (0.800), SB3 (0.787), SB2 (0.742), and SB1 (0.717).

The multiple R for this data was 0.894 while R^2 was 0.799. The rationale of satisfaction was accounted for 79.9% of SB6. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with SB6. Adjusted R^2 =0.797 referred to the level of SB6 being accounted for the regression model. The F-ratio was 396.006, $p<0.001$ with 5 and 498 degrees of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicated the overall data were of a significant fit (see Appendix C-8.4.2).

In this case, the results show that all b values of SB1-SB5 were positive relationships with SB6. In addition, the most important of the beta coefficients of relationships between predictors and outcome variables was SB5, followed by SB3, SB4, SB1, and SB2, respectively. T-test statistic results were as follows: SB5 (t (498)=11.873, $p<0.001$), SB3 (t (498)=4.751, $p<0.001$), SB1 (t (498)=3.947, $p<0.001$), SB4 (t (498)=3.852, $p<0.001$), and SB2 (t (498)=3.014, $p<0.05$) (see Appendix C-8.4.3).

Therefore, all independent variables (SB1-SB5) had a positive relationship with SB6.

H29: Rationale of repurchase intentions (RB1-RB7) has a positive effect on the overall intention to continue buying this product, rather than any alternative (RB8).

The correlation between the independent variables of RB1-RB7 and dependent variable RB8 was confirmed (see Appendix C-8.5.1). That is, RB7 (0.744) had the positive highest values with RB8. Both correlation values and partial correlation values were verified by a significant value less than 0.05 ($p<0.05$) (Field, 2009), which tended to be the best predictor of RB8. Furthermore, other predictors with a close relationship included: RB5 (0.668), RB1, (0.637), and RB4 (0.607), respectively.

The multiple R for this data was 0.817 while R^2 was 0.667. Rationale of repurchase was accounted for 66.7% of RB8. This variable was significant ($p<0.001$) at the level less than 0.05 ($p<0.05$) to correlate with RB8. Adjusted R^2 =0.663 represents the level of RB8 being accounted for by the regression model. The F-ratio was 142.217, $p<0.001$ with 7 and 496 degree of freedom. All independent variables were significant at the level below 0.05 of regression coefficients ($p<0.05$). These values indicate that the overall data had a significant fit (see Appendix C-8.5.2).

The results showed that four independent variables (RB1, RB4, RB5, and RB7) of *b* values were of a positive relationship with RB8. The beta coefficients revealed the most important relationships between predictors and outcome variables were RB7, RB5, RB4 and RB1, respectively. T-test statistic findings were as follows: RB7 (t (496)=11.655, p<0.001), RB5 (t (496)=4.979, p<0.001), RB4 (t (496)=4.180, p<0.001), and RB1 (t (496)=3.191, p<0.05) (see Appendix C-8.5.3).

As a result, three independent variables (RB2, RB3, and RB6) were rejected while four independent variables (RB1, RB4, RB5 and RB7) were accepted.

6.4.5 A comparison of P-PE factors in regression analysis

Three P-PE factors of this study were tested on both perspectives: expectation, satisfaction, and repurchase intentions. The study compared and classified the results into seven categories as summarised in Table 6.37.

Table 6.37 A comparison of P-PE factors from consumers' product perspective and consumers' brand perspective in regression analysis

A comparison of P-PE factors	Results					
	Consumers' product perspective			**Consumers' brand perspective**		
	Hypothesis	**Supported**	**Rejected**	**Hypothesis**	**Supported**	**Rejected**
Overall expectation and overall repurchase intentions	H3	EP5	-	H15	EB5	-
Rationale of expectation and overall repurchase intentions	H8	EP1-EP4	-	H25	EB3 and EB4	EB1 and EB2
Rationale of expectation and overall expectation	H10	EP1-EP4	-	H27	EB1-EB4	-
Overall satisfaction and repurchase intentions	H6	SP6	-	H18	SB6	-
Rationale of satisfaction and overall repurchase intentions	H9	SP3-SP5	SP1-SP2	H26	SB1, SB3 –SB5	SB2
Rationale of satisfaction and overall satisfaction	H11	SP3,SP4, and SP5	SP1 and SP2	H28	SB1-SB5	-
Rationale of repurchase intentions and overall repurchase intentions	H12	RP1, RP4, RP5 and RP7	RP2, RP3 and RP6	H29	RB1, RB4, RB5 and RB7	RB2, RB3 and RB6

6.5 Chapter summary

The study collected information from 504 respondents so data examination explaining response rate which was achieved with the number of each group was similar to the plan. Descriptive statistic, reliability tests and validity tests were utilized. All variables from both consumer perspectives were reliable at Cronbach's alpha values 0.9. Kurtosis and skewness indicated that the data were normally distributed. Moreover, the Kaiser-Meyer-Olkin (KMO) measure verified sampling adequacy for analysis.

As for hypothesis testing by SEM, for the consumer product perspective model, the results showed that H1 was rejected while H2-H7 were supported. As for the consumer brand perspective model, fourteen hypotheses were tested for the model investigation. It was found that H8, H11, H16 and H18 were rejected, whereas H9-H10, H12-H15, H17, and H19-H21 were supported.

The results of hypotheses testing by regression analysis were twelve hypotheses testing consumers' product perspective and seventeen hypotheses testing consumers' brand perspective. The study summarises the results of the relationship between independent variables and dependent variable, and also the relationship between independent variables and dependent variable, controlled by mediators from both perspectives as displayed in Table 6.38 and Table 6.39, respectively.

It was obvious that twelve hypotheses testing the consumers' product perspective revealed that such independent variables in H1, H2, H4, H5, H7, H9, H11, and H12 had no relation to dependent variables while all independent variables in H3, H6, H8, and H10 had a relation to dependent variables (see Table 6.38).

Table 6.38 Summary of H1-H12

Hypotheses	**Results of the individual items of factors**	
	Supported	**Rejected**
H1	TP1, TP2, TP4, TP8 and TP9	TP3, TP5, TP6, TP7, TP10, TP11, TP12, TP13 and TP14
H2	TP1,TP2, TP9, and TP13	TP3, TP4, TP5, TP6, TP7, TP8, TP10, TP11, TP12 and TP14
H3	EP5	-
H4	TP2, TP4,TP8, and TP9	TP3, TP5, TP6, TP7, TP10, TP11, TP12, TP13 and TP14
H5	TP1,TP4,TP7, TP9,and TP12	TP3, TP5, TP6, TP7, TP8, TP10, TP11, TP13 and TP14
H6	SP6	-
H7	TP2	TP1, TP3, TP4, TP5, TP6, TP7, TP8, TP9, TP10, TP11, TP12, TP13, and TP14
H8	EP1-EP4	-
H9	SP3-SP5	SP1 and SP2
H10	EP1-EP4	-
H11	SP3-SP5	SP1 and SP2
H12	RP1, RP4, RP5 and RP7	RP2, RP3 and RP6

Table 6.39 illustrates seventeen hypotheses testing consumers' brand perspective. It was discovered that such independent variables in H13 to H17, H19 to H26, and H29 had no relation to dependent variables while all independent variables in H18, H27, and H28 were related to dependent variables.

Table 6.39 Summary of H13-H29

Hypotheses	Results of the individual items of factors	
	Supported	**Rejected**
H13	BTB2, BTB4, BTB7 and BTB8	BTB1, BTB3, BTB5 and BTB6
H14	BTB1, BTB5, BTB7 and BTB8	BTB2, BTB3, BTB4 and BTB6
H15	EB5	-
H16	BTB2, BTB4 and BTB8 (Partial mediation)	BTB1,BTB3, BTB5, BTB6 and BTB7
H17	BTB1,BTB2, BTB5, BTB7 and BTB8	BTB3, BTB4, and BTB6
H18	SB6	-
H19	BTB2, BTB4, and BTB8 (Partial mediation)	BTB1, BTB3, BTB5, BTB6 and BTB7
H20	BEB4, BEB5, BEB8 and BEB11	BEB1, BEB2, BEB3, BEB6, BEB7,BEB9, BEB10 and BEB12
H21	BEB5, BEB8, BEB11 and BEB12	BEB1, BEB2, BEB3, BEB4, BEB6, BEB7, BEB9 and BEB10
H22	BEB11 (Partial mediation)	BEB1, BEB2, BEB3, BEB4, BEB5, BEB6, BEB7, BEB8, BEB9, BEB10 and BEB12
H23	BEB1, BEB2, BEB5, BEB8, BEB11and BEB12	BEB3, BEB4, BEB6, BEB7, BEB9 and BEB10
H24	BEB4, BEB8 and BEB11 (Partial mediation)	BEB1, BEB2, BEB3, BEB5, BEB6, BEB7, BEB9, BEB10 and BEB12
H25	EB3 and EB4	EB1 and EB2
H26	SB1, SB3, SB4, and SB5	SB2
H27	EB1-EB4	-
H28	SB1-SB5	-
H29	RB1, RB4, RB5, and RB7	RB2, RB3, and RB6

The study further discusses the results in the next chapter.

Chapter 7

Discussion

7.1 Introduction

This chapter presents a discussion of the results of this study. The study findings should be seen in light of the two different consumer perspectives: product; and brand, as analysed in Chapter 6. The investigation referred to prior studies, that interpret the SEM model assessment (e.g. Lymperopoulos *et al.,* 2000; Hellier *et al.*, 2001; Ha *et al*., 2010; Wen *et al.*, 2011) and regression model assessment (e.g. Voss *et al*., 2010; Seiders *et al.,* 2005; Cho *et al.*, 2002).

Section 7.2 presents a discussion of hypothesis testing in comparison with a literature review, classified into three sub-sections: hypothesis supported results for the consumer product perspective; hypothesis supported results for the consumer brand perspective; and hypothesis rejected results. Section 7.3 presents the results of the full P-PE model for repurchase intentions of credence products. Finally, this chapter is summarised in section 7.4.

7.2 Discussion of the hypothesis results

7.2.1 Discussion of supported results from the consumers' product perspective

According to hypothesis testing by structural equation modelling (SEM) analysis as described in Chapter 6, six hypotheses were supported for the consumer product perspective: H2-H7. Ten hypotheses of the consumer brand perspective were also supported: H9-H10, H12-H15, H17, and H19-H21. In order to understand how Thai consumers interact with post-purchase evaluation factors for repurchase intentions of credence products, the research also investigated the relationship between independent and dependent variables through testing by regression analysis, discussed in the following section.

7.2.1.1 Consumer trust and consumer expectations of credence products

The hypothesis that consumer trust has a direct effect on consumer expectation of credence products (H2) is supported by SEM. This result is consistent with that of Rousseau *et al*. (1998), Sirdeshmukh *et al.* (2002), and Hsu and Cai, (2009), stating that trust and expectation are correlated. Customers often purchase products again when they find that their expectations are met (Seiders *et al*., 2005; Voss *et al*., 2010). As Sirdeshmukh *et al.* (2002) state, consumers perceive prior expectations of products they have tried and when these are met, this leads to consumers' trust in that product.

In terms of results from the multiple regression analysis, four independent variables of consumer trust were found to have a direct effect on how products meet overall consumer expectations, which was partially supported. That is, “the quality of this product has been very consistent”; “the product has a good performance/quality”; “the quality control process of the product is trustworthy”; and “the quality and safety are certified by third party organisations or governments”. All correspond to Gardial *et al.*’s (1994) work, which suggested that consumers may change their mind if product quality or product features do not meet their needs or products are higher quality than expected. Therefore, consumers may decline to purchase or repurchase products, when quality is lacking.

The findings show that the other ten items measuring relating to consumer trust do not correlate with how the products meet consumer overall expectations. Such items consist of: “the production process of the product is trustworthy”; “the firm of the product is trustworthy”; “the firm of the product keeps its promises made to customers”; “the firm of the product has a reputation for honesty”; “the product is certified by standard assurances”; “nutritional benefits are trustworthy”; “nutrition information is trustworthy”; “ingredients information is trustworthy”; and “side effect information is trustworthy”. In the case of Thai credence products users, these findings are not related to the existing literature, and are not in the line with Kola and Latvala’s (2003) investigation, which pointed out that safety and quality information are important factors for buying more, especially for beef products. On the other hand, for dietary supplements as credence products in the Thai

context, these items of consumer trust are not relevant to how the products meet consumer overall expectations. Moreover, the findings are not consistent with Mabiso *et al.*'s study (2005), which stated that trustworthy product labelling can encourage consumers to pay more for products, especially those that which indicate safety information, side effects and quality characteristics with trustworthy references. This result may lead to the problems of credence products that may affect consumers. That is, when consumers need an expensive product, they are willing to spend more money on products but their expectations are raised by product advertisements, and the products are then disappointing because they don't meet these expectations (Dullect and Kerschbamer, 2006).

7.2.1.2 Consumer trust, consumer expectations, and consumer repurchase intention of credence products

The hypothesis that consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence products (H4) is supported by SEM. This finding extends the definition of Sirdeshmukh *et al.* (2002, p. 17) of consumer trust as "the expectations held by the consumer that the service provider is dependable and can be relied on to deliver on its promises". Such a result in this context indicates that consumer expectations have an indirect effect on the relationship between consumer trust and repurchase intentions of credence products with respect to dietary supplements in Thailand. In sum, consumers do not purchase the product again if the product features do not respond to their needs or expectations (Gardial *et al.*,

1994). Therefore, consumer expectation is an important mediator affecting the relationship between consumer trust and consumer repurchase intentions.

Similarly, multiple regression analysis testing of how the products meet the consumer's overall current expectations is mediated by the relationship between consumer trust and the overall intention to continue buying this product, rather than an alternative. For this finding, four items measuring consumer trust are partially supported: "this product has been very consistent"; "the quality control process of the product is trustworthy"; "the firm of the product is renowned for attending to customers' needs and wants"; and "the quality and safety are certified by third party organisations or governments". These variables are revealed to be significantly related to credence characteristics as guarantees of the product by a third party, which can lead to consumer reliance on the product (Krouse, 1990). This empirical evidence is corroborated by the conclusions of Dentoni *et al*. (2009) and Gao *et al*. (2010) that the number of quality product characteristics for consumers tends to increase, especially in the case of food safety. Therefore, the companies need to focus on credence attributes in their products. For example, presenting some trustworthy evidence for consumers or providing significant data to confirm the quality of the product. For these reasons, consumers feel more confident in buying products (Andersen and Philipsen, 1998). Moreover, Rijswijk and Frewer (2008) posit that credence attributes are indicated by quality and safety. It is important for the credence product companies to create product attributes as a promise with consumers. Certification by a government agency or a

third party authority is necessary for product trustworthiness (Caswell and Mojduszka, 1996).

However, the other ten components of consumer trust do not support the hypothesis that the relationship between consumer trust and the overall intention to continue buying this product (rather than an alternative) is mediated by how the products meet consumers' overall current expectations. The independent variables include the trustworthiness of the production process, firm, nutritional benefits, nutritional information, ingredients information, and side effect information, Moreover, the consumers are concerned about whether the products deliver as promised, and the products are certified by standard assurance.

In sum, this study suggests that ten items have no effect on the overall intention to continue buying this product (rather than an alternative), and that this is mediated, particularly in the Thai context of credence products with respect to dietary supplements. This finding is similar to that of Andersen and Philipsen (1998) in terms of the seller perspective when consumers buy a credence product, which indicates that consumers do not trust product quality or credence characteristics.

7.2.1.3 Consumer trust of, and consumer satisfaction with, credence products

As expected, consumer trust has a direct effect on consumer satisfaction with credence products (H3), which is tested by SEM. H3 is supported, in agreement with Selnes (1998), Geyskens *et al*. (1999), Chiu *et al*. (2009), Randall *et al*.

(2011), and Kaveh (2012), who suggest that satisfaction is one of the factors that impacts on trust. In addition, a number of authors pointed out that a link between trust and satisfaction can maintain the connection between the manufacturers/ businesses and customers in the long run (Morgan and Hunt, 1994; Doney and Cannon, 1997; Kim *et al.*, 2009).

Meanwhile, each component of consumer trust, tested by multiple regression analysis, posits that the statement "consumer trust has a positive effect on the overall consumer satisfaction with the product" is supported. In particular, consumers focus on products and nutritional information that are trustworthy, safe, consistent in term of the products' quality, the reputation of the firm, and certification from third party organisations or government. The existing literature suggests that certification by a government or a third party authority is necessary for product trustworthiness (Caswell and Mojduszka, 1996). Trustworthy product labelling can encourage consumers to pay more for products, especially products with safety information, side effects and quality characteristics with trustworthy references (Mabiso *et al.*, 2005). These findings generally support the current study, which found that the product quality of consumer trust factors leads to consumer satisfaction, which is confirmed in the context of Thai users of dietary supplements.

However, the other nine items measuring consumer trust have no effect on consumer satisfaction. With respect to consumers' product perspective, consumer trust is not correlated with satisfaction of credence products in the Thai context

with respect to dietary supplements. Because of this, consumers can also notice credence products by satisfaction after purchasing or satisfaction after a comparison with a prior purchase (Nelson, 1970 cited in Nagler *et al*., 2011, p.238). In this case, those items have no impact on consumer satisfaction, and consumers may decline to purchase the products in the future.

7.2.1.4 Consumer trust, consumer satisfaction, and consumer repurchase intentions of credence products

The hypothesis that consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence product (H5) is supported by SEM. Under these circumstances, satisfaction refers to products or brands that can deliver customer's needs. Customers also respond to a positive side to products or brands and customer pleasure is evaluated by the level of customer fulfillment consumption (Oliver, 1997). Many authors agree that satisfaction affects consumer purchase and repurchase (Hirschman, 1970; Oliver, 1980; Wilkie, 1994; Hennig-Thurau and Klee, 1997; Fornell, 1992; Anderson, 1994; Schutte and Ciarlante, 1998; Mittal and Kamakura, 2001; Yi and La, 2004; Bolton *et al*., 2006; Donjin *et al*., 2008; Fornell *et al.*, 2010; Ha *et al*., 2010; Voss *et al.,* 2010; Kaveh, 2012). Accordingly, in this study, consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions of credence products in the Thai context.

However, the hypothesis testing by multiple regression analysis shows that only one item of consumer trust is partially supported. That is, the overall satisfaction with products has a mediating effect on the relationship between "the product has a good performance/quality" and "the overall intention to continue buying this product, rather than any alternative". Consumer satisfaction has no mediating effect on thirteen independent variables of consumer trust and the overall intention to continue buying this product (rather than an alternative). These items consist of "the quality of this product has been very consistent"; "the production process of the product is trustworthy"; "the quality control process of the product is trustworthy"; "the firm of the product is trustworthy"; "the firm of the product keeps its promises made to customers"; "the firm of the product has a reputation for honesty"; "the firm of the product is renowned for attending to customers' needs and wants"; "the quality and safety of the safety are certified by third party organisations or governments"; "the product is certified by standard assurances"; "nutritional benefits are trustworthy"; "ingredients information is trustworthy"; and "side effect information is trustworthy". As a result, this study suggests that "the product has a good performance/quality" is an important item of consumer satisfaction for consumer repurchase, which is in agreement with Hellier *et al*. (2003) that customers' previous purchase loyalty and perceived quality has no direct effect on customer satisfaction. Meanwhile, the other thirteen items are not related to credence products literature. However, this research observed that only "the product has a good performance or quality" contributes to the overall intention to continue buying this product (rather than an alternative) which is mediated by "overall satisfaction with the product". Interesting, this study

discovered that it is possible that Thai consumers understand that the product quality covers all credence attributes. Therefore, future research needs to clarify the meaning of product quality.

7.2.1.5 Consumer expectations and consumer repurchase intentions of credence products

This section discusses how consumer expectations have a direct effect on consumer repurchase intentions of credence products (H6). After tested by SEM, the assumption was supported. The magnitude of this impact is consistent with the research of Zeithaml *et al*. (1993), Gupta and Stewart (1996), Spreng *et al.* (1996), and Walker and Baker (2000), who reported that expectations directly impact on the consumer's pre-purchase behaviour and also indirectly on consumer's repurchase decisions and post-purchase behaviour.

The result from the simple regression analysis suggest that how the products meet consumer overall current expectations makes a significant contribution to the overall intention to continue buying this product (rather than an alternative). The multiple regression analysis reports that four hypotheses have a positive effect on the overall intention to continue buying this product/brand (rather than an alternative). All the items of the consumer product perspective are supported, which consist of "this product provides the dietary supplements level"; "your needs and wants are fulfilled by this product"; "this product provides benefits corresponding to its price"; and "your expectations are higher than before

consuming it". As Schiffman and Kanuk (2004) observed, customers often purchase products again when they find that their expectations are met. Accordingly, customer expectations also depend on customer experience with products (Cadotte *et al*, 1987; Carman, 1990).

7.2.1.6 Consumer satisfaction and consumer repurchase intentions of credence products

The hypothesis relating to satisfaction has a direct effect on consumer repurchase intentions of credence products is acceptable while being tested by SEM (H7: consumers' product perspective; and H20: consumers' brand perspective) The finding is correlated with "customer satisfaction has an impact on repurchase intention" (Wilkie, 1994; Dongjin *et al*., 2008; Fornell *et al.*, 2010; Voss *et al.*, 2010; Kaveh, 2012). Moreover, several researchers are of the opinion that satisfaction also affects consumer purchase and repurchasing (Hirschman, 1970; Schutte and Ciarlante, 1998; Fornell, 1992; Anderson, 1994; and Ha *et al*., 2010).

Simple regression analysis suggests that overall consumer satisfaction with the product/brand is a significant contributor to the overall consumer intention to continue buying this product/brand (rather than an alternative). Likewise, multiple regression analysis showed that three components of rationale satisfaction are supportive of the consumer product perspective. That is, "it is a correct decision to purchase this product"; "you are satisfied with information content this product";

and “you are satisfied with the quality of this product” have a positive effect on the overall intention to continue buying this product (rather than an alternative).

At the same time, four components of the consumer brand perspective are supported: “you are so satisfied with this brand such that you will recommend it to family, friends, and colleagues”; “it is a correct decision to purchase this brand”; “you are satisfied with information content this brand”; and “you are satisfied with the quality of this brand”. As Wilkie (1994) stated, satisfaction is a major reason for future purchase behaviour. Customer satisfaction is significantly relevant to repurchase intention (Oliver, 1980; Yi and La, 2004). Many investigations stipulate that customer satisfaction usually has a positive impact on customer loyalty as well as repeat purchase (Mittal and Kamakura, 2001).

However, only two predictors of rationale of consumer satisfaction were not associated with the overall consumer intention to continue buying this product, (rather than an alternative): “you are so satisfied with the product that you will recommend it to family, friends, and colleagues” and “providing unexpected performance sometimes impresses you deeply and you are so satisfied”. From a consumer brand perspective, only one predictor of rationale of consumer satisfaction has no relationship with the overall consumer intention to continue buying this product: “providing unexpected performance sometimes impresses you deeply and you are so satisfied”. In other words, the results show that two items for consumers’ product perspective and one item for the consumer brand perspective have no relationship with repurchase intentions in this context. Therefore, the current research according to multiple regression analysis, points

out that when consumers do not gain any more performance from the current products or brands, they may decline to repurchase.

7.2.2 Discussion of supported results from the consumers' brand perspective

7.2.2.1 Consumer brand trust and consumer expectations of credence products

For structural equation modelling testing, the findings show that consumer brand trust has a direct effect on consumer expectations of credence products (H9), which is supported. The result is consistent with the existing literature, for example a study by Delgado-Ballester *et al*. (2003), which suggest that consumers feel a general expectation of that brand. Similarly, expectation plays a vital role in consumer trust in brands (Barber, 1983). As Schiffman and Kanuk (2004) observed, customers often purchase products again when they find that their expectations are met.

As for multiple regression analysis testing, it supported that consumer brand trust has a positive effect on "overall this brand meets your current expectations", in that four of eight items of brand trust supported the relationship: "this brand meets your expectations", "this is an honest and sincere brand", "this brand would make any effort to make you be satisfied", and "this brand would compensate you if any problem with this product occurs". These scale items have a positive effect on

how this brand meets consumer overall current expectation. In other words this research suggests that consumer brand trust contributes to consumer expectations.

However, four other components are not supported: “you feel confidence in this brand”; “this brand never disappoints you”; “this brand guarantees your satisfaction”; “you could rely on this brand for problem-solving”. These scale items of consumer brand trust do not contribute to consumer expectations, specifically in the Thai context, as these items have no significant effect on consumer expectations. These hypotheses are rejected for the consumer brand perspective.

7.2.2.2 Consumer brand trust and consumer satisfaction of credence products

The current findings confirm that brand trust has a direct effect on satisfaction of credence products (H10) is supported by SEM. Prior studies also found that trust in the brand is a factor in a successful business (Chisnall,1985; Seiders *et al*., 2005; Voss *et al*., 2010). In this study, the finding is significant in terms of why consumer brand trust has a direct effect on consumer satisfaction. As Aaker (1996) stated, brand trust stems from consumer satisfaction with product performance and quality. The finding contributes to consumer satisfaction of credence products with respect to users of vitamins, minerals, and herbs or other botanicals in Thailand as shown in Table 6.5.

For multiple regression testing, it was found that “brand trust has a positive effect on the overall satisfaction with the brand” was supported by five items: “this brand meets your expectations”; “you feel confidence in this brand”; “this is an honest and sincere brand”; “this brand would make any effort to make you be satisfied”; and “this brand would compensate you if any problem with this product occurs”. As previous research observed, brand trust is related to satisfaction and customer experiences (Papadopoulou *et al.,* 2001; Urban *et al.,* 2000). This result is also consistent with the work of Delgado-Ballester *et al*. (2003) regarding consumer perception and also responds to consumer’s needs, especially in terms of satisfaction. When consumers repurchase the same brand, it means that they have a higher trust in that brand and that brand is reliable (Chaudhuri and Holbrook, 2001).

The finding also offers alternative suggestions: three predictors of consumer brand trust rejected this hypothesis, which is the same as the result in the previous section on consumer brand trust and consumer expectations: “this brand never disappoints you”; “this brand guarantees your satisfaction”; and “you could rely on this brand for problem-solving”. Based on this finding, however, this research concludes that these scale items have no significant effect on both consumer expectations and consumer satisfaction from the consumer brand perspective in a Thai context. These reasons correspond with Oliver’s (1997) study, which states that satisfaction refers to products or brands that can deliver customer’s needs. Customers also respond to a positive side to products or brands, and the customer’s pleasure is evaluated by level of customer fulfillment. In this case,

Thai consumers may not be completely satisfied and some are disappointed with their current brand.

7.2.2.3 Consumer brand trust, consumer satisfaction, and consumer repurchase intentions of credence products

The study also tests the relationship between consumer brand trust and consumer repurchase intentions of credence products, via the mediating effect of satisfaction (H12), which is supported by SEM testing. This finding is understandable in terms of the high level of satisfaction on brand trust that can lead consumers to a positive turning back to products (Ha, 2004). This is supported by Morgan and Hunt (1994), who also support the idea that brand trust is related to satisfaction and can predict consumer future purchasing.

The finding of multiple regression analysis demonstrates that the relationship between three items measuring of consumer brand trust and the overall intention to continue buying this brand (rather than an alternative), is mediated by overall satisfaction with the brand. Moreover, not only is satisfaction related to cognitive judgments, but it is also emotional and affective to the consumer experience (Mano and Oliver, 1993). This statement is consistent with the results of this study, which are partially mediated and supported by such reasons as consumers feeling confidence in this brand, the current brand makes consumers satisfied and also solves their problems.

On the other hand, five other components of consumer brand trust are not accepted: "this brand meets your expectations"; "this brand never disappoints you"; "this is an honest and sincere brand"; "you could rely on this brand for problem-solving"; and "this brand would make any effort to make you satisfied". For credence products with respect to dietary supplement in the Thai context, the data indicates that those items have no relation to the overall intention to continue buying this brand (rather than an alternative), even they are mediated by overall satisfaction with the brand variable

7.2.2.4 Consumer brand experience and consumer repurchase intentions of credence products

The statement that "The consumer brand experience has a direct effect on consumer repurchase intentions of credence products" (H13) is supported by SEM testing. This result, related to repeat purchase behaviour, is often associated with a specific brand which stems from experience or knowledge (Singh and Sirdeshmukh, 2000). Correspondingly, Slassi (2005) mentioned that the major reason for a consumer to return to purchase a product again is that the brand offers tremendous quality, which builds consumers' sensory experience and makes a strong relationship among consumers and brands. An empirical study conducted by Hume *et al*. (2007) found that customer's emotions and the nature of emotional appraisal have a vital role in consumption and re-consumption. Consumers also respond to the brand, which consists of "lifestyles and interaction with the brand" (Zarantonello and Schmitt, 2010, p. 533). Moreover, the findings on brand

consumption, drawn from Schembri *et al*. (2010), support that when consumers decide to consume products or brands, they have different objectives. Some of them may choose the same brand and others may consume different brands. The rationale of choosing is that consumers consider which products or brands can respond to their need or their life.

As for multiple regression analysis testing, the hypothesis was that: brand experience has a positive effect on the overall intention to continue buying this brand (rather than an alternative). The results indicate that three main dimensions of brand experiences are supported, each of which consists of two independent variables of affective experience: "this brand induces feelings and sentiments"; and "you feel great using this brand"; one independent variable of intellectual experience: "this brand does not make you consider much"; and one independent variable of bodily experience: "your body is revitalised when you have consumed this brand". This has a positive effect on the overall intention to continue buying this brand (rather than an alternative). These results of affective experience are related to the degree to which emotion plays a role in cognition, activity, and social behaviour (Bagozzi *et al*., 1999). Current findings are consistent with those of Hume *et al*. (2007), which revealed how customer emotion and the nature of emotional appraisal have a vital role in consumption and re-consumption. The intellectual experience result is associated with the findings of Zarantonello and Schmitt (2010) who indicated that when brand has more quality and ability, this reasons consumer does not consider much to purchase. Moreover, bodily experience, also drawn from research by Zarantonello and Schmitt (2010), is the

interaction of a consumer responding to the brand. In conclusion, the present study suggests that repeat purchase behaviour is associated with a specific brand or product which stems from experience or knowledge (Singh and Sirdeshmukh, 2000).

Eight independent variables are not accepted for this hypothesis, which are classified by brand experience dimensions. The sensory dimension include: "you find this brand interesting in a sensory way"; "this brand makes a strong impression on your visual sense or other senses"; and "this brand appeals to your senses". These findings indicate that the sensory dimension has no connection with Schmitt's (1999) suggestion that the major reason for consumers to return to purchase a product again is "the brand offers tremendous quality", which builds consumers' sensory experience and makes a strong relationship between consumers and brands.

For the affective dimension, the statement that: "this brand is an emotional brand" was not accepted, supporting Oliver's (1999) observation that consumer attitudes are usually related to consumer emotions or feelings and thus could signify loyalty in many ways. Westbrook and Oliver (1991) also confirmed that the fundamental emotion relates to specific situations and has psychological urgency in consumer motivations. In this study, consumers may be dissatisfied with a brand, and the feeling of dissatisfaction adversely affects their future purchases (Kincade *et al*., 1998).

The intellectual experience dimension in this study included: “this brand stimulates your curiosity and problem solving”; and “you are engaged in a lot of thinking when you encounter this brand”. Results from multiple regression analysis testing those two independent variables are contradictory to Schmitt’s (1999) study, which suggests that consumers perceive that their problems will be solved by products or brands with marketing campaigns that respond to their needs. This is because consumers evaluate product features, benefits, and quality by product or brand campaigns.

Lastly, the behavioural experience dimension consists of: “this brand results in bodily experience”; and “you have recognised this brand”. This hypothesis does not support the literature by two independent variables for the Thai context. While Schmitt (1999) observed that consumers will change their lifestyle when they interact with the brand, the present finding shows that Thai consumers of credence products do not respond to two items of behavioural experience. Instead, the study suggests that credence products with respect to dietary supplements should focus on strategies to increase consumer physical experience.

7.2.2.5 Consumer brand experience and consumer expectations of credence products

Results from SEM analyses concerning the statement that “the consumer brand experience has a direct effect on expectation of credence products” (H14) are supported by the effect of consumer brand experience on expectation. It is

noteworthy that this result is consistent with that of Day (1977) who pointed out that the rationale of choosing is that consumers consider which products or brands can respond to their need or their life. In detail, the regression analysis reports that four independent variables of brand experience have a positive effect on how this brand meets your overall current expectations which includes: "you feel great using this brand"; "this brand does not make you consider much"; "your body is revitalised when you have consumed this brand" and "you have recognised this brand" while "this brand is an emotional brand" is the only item with a negative relationship in this hypothesis. Furthermore, customer expectation also depends on the customer experience with products (Cadotte *et al*., 1987; Carman, 1990).

The results revealed that the regression coefficient is positive and there is a positive relationship among four independent variables of brand experience and the overall of consumers' current expectation with a brand (e.g. feeling great using this brand, this brand does not make consumers consider much, consumers' bodies are revitalised and recognition of a brand). In the Thai context, the level of expectation is also involved in the prior satisfaction with brand and quality of product. If the customers are highly satisfied with their prior experience, their expectation will increase (Anderson and Sullivan, 1993). In this case, brand experience will be successful when consumers can recover their memory (for example, name, story, or episode), particularly, consumers recall and recognise brands (Zajonc, 1980). Chaudhuri and Holbrook (2001) advocated that a brand affect dimension is a stimulation of consumers' emotional reaction. Moreover, if the consumers of brand experiences change, their expectation may change. This

corresponds to Devlin *et al*.'s (2002) study, which suggests that expectation represents what a product provides to customers and what customers feel should be offered.

Eight predictors of brand experience have no positive effect on how the products meet overall current expectation: "you find this brand interesting in a sensory way"; "this brand makes a strong impression on your visual sense or other senses"; "this brand appeal to your senses"; "this brand induces feelings and sentiments"; "this brand is an emotional brand"; "this brand stimulates your curiosity and problem-solving"; "you are engaged in a lot of thinking when you encounter this brand"; and "this brand results in bodily experience". These variables are mostly rejected for consumer brand experience, suggesting that scale items of sensory dimension are rejected while scale items of affective, intellectual experience, and bodily experience are partially rejected. Based on these results, the study can suggests that sensory dimensions have no direct impact on how products meet overall current expectation and do not impact on Thai dietary supplements users, specifically those who consume vitamins, minerals, and herbs or other botanicals.

7.2.2.6 Consumer brand experience and consumer satisfaction of credence products

According to hypothesis testing by SEM, "brand experience has a direct effect on satisfaction of credence products" (H15) is supported. The current finding

confirms that brand experience also affects consumer satisfaction (Reicheld, 1996; Oliver, 1997; Brakus *et al*., 2009). The result also lends support to the notion of Day (1977) that consumers are really satisfied with the products and some experience makes for an important aspect to the consumers, and then they tend to repurchase and also recommend the product to others. Further, multiple regression analysis confirms that six independent variables of twelve items brand experience are in support of the overall satisfaction with the brand: "you find this brand interesting in a sensory way"; "this brand makes a strong impression on your visual sense"; "you feel great using this brand"; "this brand does not make you consider much"; "your body is revitalised when you have consumed this brand"; and "you have recognised this brand". The result also strongly supports the previous studies as customer satisfaction shows a significant effect on brand trust and brand experience (Ha and Perks, 2005). Specifically, "you have recognised this brand" also agrees with Ha and Perks (2005) who pointed out that recognition of brands can build a deeper memory into the mind of the consumer and lead to customer trust in the brand.

Six items measuring consumer brand experience have no positive impact on overall satisfaction with the brand: "this brand appeal to your senses"; "this brand induces feelings and sentiments"; "this brand is an emotional brand"; "this brand stimulates your curiosity and problem-solving"; "you are engaged in a lot of thinking when you encounter this brand"; and "this brand results in bodily experience". This result shows that six scale items of consumer brand trust partially reject overall satisfaction with the brand. Those items are part of the

sensory, affective, intellectual, and bodily experience sub-sets, respectively. The current research concludes that in the Thai context of consumers' brand perspective, those item have no direct impact on consumer satisfaction.

7.2.2.7 Consumer brand experience, consumer satisfaction and consumer repurchase intentions of credence products

As expected, the statement "consumer satisfaction has a mediating effect on the relationship between brand experience and repurchase intentions of credence products" (H17) is supported by SEM testing. These findings are correlated with the existing literature, which suggests that satisfaction can indicate post-purchase behaviour (Gardial *et al*., 1984) and post-purchase or post-use evaluations are related to satisfaction (Westbrook and Oliver, 1991). This is in connection with Oliver (1980) and Cadotte *et al*, (1987) who contended that future purchasing is based on consumers experiencing products or brands, leading to their satisfaction and future decisions.

The findings from multiple regression analysis demonstrates that three predictors of consumer brand experience support the hypothesis concerning the relationship between consumer brand experience and the overall consumer intention to continue buying this brand (rather than an alternative), is mediated by overall satisfaction with the brand. These predictors include: "this brand induces feelings and sentiments"; "this brand does not make you consider much"; and "your body is revitalised when you have consumed this brand". It is interesting to note that in

the Thai context, consumers tend to buy the same brand of dietary supplements and not to think too much when they buy this brand again while experiencing that their body is revitalised when they have consumed this brand.

However, nine predictors of consumer brand experience are not connected, even via the overall satisfaction with the brand, as follows: “this brand is interesting in a sensory way”; “this brand makes a strong impression on your visual sense or other senses”; “this brand appeals to your senses”; “you feel great using this brand”; “this brand is an emotional brand”; “this brand stimulates your curiosity and problem-solving”; “you are engaged in a lot of thinking when you encounter this brand”; “this brand results in bodily experience”; and “you have recognised this brand”. The findings show that those items are relevant to consumer feelings. In the Thai context, the study suggests, consumer feelings have no relation to repurchase intentions with the same dietary supplements brand. However, the quality of brand is more important than those items. This is consistent with credence products reviews, which posit that consumers probably evaluate their judgements by consumption experience (Hahn, 2004).

7.2.2.8 Consumer expectations, consumer satisfaction, and consumer repurchase intentions

The hypothesis testing by structural equation modelling analysis revealed that the statement that “consumer expectation has a direct effect on consumer satisfaction of credence products” (H19) is supported. The finding is related to the existing

literature that customer satisfaction occurs after purchasing or consuming a product while being related to customer expectation (Anderson and Sullivan, 1993; Yi and La, 2004; Sarangapani and Mamatha, 2008). This is also in support of Oliver (1980, 1981) who commented that levels of consumer satisfaction have an impact on consumer expectations.

The hypothesis that consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intentions of credence products (H21) is supported by SEM analysis. Such a finding is correlated with Yi and La's (2004) study regarding the role of adjusted expectation, associated with customer satisfaction and repurchase intention. Expectation is a post-purchase evaluation factor, which affects purchase behaviour for the next period and also influences customer satisfaction. In addition, future purchasing behaviour and customer satisfaction are derived from expectation. The degree of customer satisfaction with each item will affect post-purchase expectations.

7.2.3 The results of rejection discussions

Five hypotheses were rejected by SEM testing: "consumer trust has a direct effect on consumer repurchase intentions of credence products" (H1) from the consumer product perspective; four hypotheses of the consumer brand perspective: "brand trust has a direct effect on consumer repurchase intentions of credence products" (H8); "consumer expectations have a mediating effect on the relationship between

consumer brand trust and consumer repurchase intentions of credence product" (H11); "consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence product" (H16); and "consumer expectation has a direct effect on repurchase intentions of credence products" (H18).

The findings are explained in light of the literature in what follows.

7.2.3.1 Consumer trust and consumer repurchase intention

After testing by SEM, the statement "consumer trust has a direct effect on consumer repurchase intentions of credence products" (H1) is rejected. The study is not related to the existing literature on consumers' reliance on products due to positive outcomes from using the product (Lau and Lee, 1999). It also contradicts the study of Choi and Kim (1996) and Donio *et al.* (2006), who proposed that the role of trust in a product affects consumer decision-making, while disagreeing with Eisingerich and Bell (2007) and Chui *et al.* (2009), who advocated that trust and repurchase are correlated. In other words, in the Thai context of credence products, consumer trust has no direct effect on consumer repurchase intentions.

The multiple regression analysis indicated that nine of fourteen items measuring of consumer trust reject the relationships with the overall intention to continue buying this product (rather than an alternative). This result revealed that the factors of firm, nutrition, and product information have no effect on consumer's re-consumption of credence products with respect to dietary supplements in the

Thai context. This result does not support the studies of Doney and Cannon (1997), Lymperopoulos *et al.* (2010), and Moser *et al.* (2011). Therefore, those items do not contribute to the overall intention to continue buying this product (rather than an alternative), for credence products with respect to dietary supplement users in Thailand.

However, this study does confirm that consumer trust has an impact on repurchase intentions, when it is mediated by consumer expectation or consumer satisfaction (see sections 7.2.1.2 and 7.2.1.4).

7.2.3.2 Consumer brand trust and consumer repurchase intentions

With respect to H8, "Consumer brand trust has a direct effect on repurchase intentions of credence products", this hypothesis is not accepted in this study by SEM testing. Thus, this finding is not consistent with previous studies, which indicated that brand trust plays a vital role in customer relationship and customer repurchasing (Selnes, 1998; Singh and Sirdeshmukh, 2000). When consumers repurchase the same brand, it means that they have higher trust in that brand and feel that brand is reliable (Chaudhuri and Holbrook, 2001).

Testing by multiple regression analysis revealed that for the statement "consumer brand trust has a positive effect on the overall intention to continue buying this brand, rather than an alternative", four of eight independent variables of brand trust do not support the relationships with the overall intention to continue buying

this brand (rather than any alternative). Therefore, in this context, those items relating to this hypothesis do not contribute to the overall intention to continue buying this brand, rather than any alternative, for Thai credence products with respect to dietary supplements users. A possible reason might be that during the time consumers consumed that brands, consumers find that these brands do not respond to their expectation and their problems are not solved by their current brand so there is no relationship between consumer brand trust and repurchase intention, specifically for those four items.

However, four items partially support hypothesis H8. This finding is similar to that of Aaker (1996) who states that brand trust stems from consumer satisfaction with product performance and quality. Additionally, a trustworthy brand is based on different levels of customer emotion and recognition (Delgado-Ballester, 2004).

Previous research suggests that brand trust is related to satisfaction and customer experiences (Papadopoulou *et al.*, 2001; Urban *et al.*, 2000). The present study indicated that the relationship between consumer brand trust and consumer repurchase intention of credence products is mediated by consumer satisfaction.In other words, the hypothesis is supported (see section 7.2.2.3).

.

7.2.3.3 Consumer brand trust, consumer expectations, and consumer repurchase intentions of credence products

As expected, the study tests a mediating effect on the relationship between brand trust and repurchase intentions of credence products via consumer expectations (H11), which is rejected by SEM testing. This result indicates that consumer brand trust does not contribute to consumer repurchase intention, via the resulting consumer expectations. In addition, this finding is not related to what Yi and La (2004) found, that a different level of experience of products or brands has an effect on customer expectation. Moreover, this hypothesis disagrees with the existing literature which states that expectation directly impacts on the consumer's pre-purchase behaviour and also indirectly on consumer's repurchase decision and post-purchase behaviour (Zeithaml *et al*., 1993; Gupta and Stewart, 1996; Spreng *et al*., 1996; Walker and Baker, 2000).

For the multiple regression analysis, five items measuring consumer brand trust show no relation: "this brand meets your expectations"; "this brand never disappoints you"; "this is an honest and sincere brand"; "you could rely on this brand for problem-solving"; and "this brand would make any effort to make you be satisfied". This result suggests limitations to the use of credence products in the Thai consumer context as Thai consumers do not associate themselves with those scale-items. In other words, they tend to focus on the guarantee rather than other qualifications. These scale items do not contribute to the overall consumer intention to continue buying this brand (rather than an alternative), even via this

brand meeting the overall current expectations, specifically in the Thai context. It is thus evident that those items of consumer brand trust have no significant effect on the overall consumers' current expectations, in term of multiple regression analysis results.

Meanwhile, consumer brand trust is related to the overall intention to continue buying this brand, rather than any alternative, via how this brand meets your overall current expectation. Three independent variables of consumer brand trust are supported: "you feel confidence in this brand"; "this brand guarantees my satisfaction"; and "this brand would compensate you if any problem with this product occurs". That is, the current study revealed that those scale-items contribute to repurchase intentions of credence products, specifically in the Thai context.

7.2.3.4 Consumer brand experience, consumer expectations, and consumer repurchase intentions of credence products

The hypothesis "Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions of credence products" (H16) is rejected by SEM testing. This finding disagrees with prior research; for example, Slassi (2005). Slassi's research states that the major reason for consumers to purchase a product again is that the brand offers high quality, which can build consumers' sensory experience and make a strong relationship between consumers and brand. In addition, Santos and Boote

(2000) conceptualised the predicted standard expectation as core expectations, which rely on consumers' own previous experiences, current experiences, and the experiences of others. In this study, consumer expectation did not mediate the effect of consumer brand experience on consumer repurchase intentions.

The results from multiple regression analysis indicate that the relationship between consumer brand experience and the overall consumer intention to continue buying this brand (rather than an alternative), is mediated by how this brand meets the consumer's overall current expectation. Two of twelve predictors of brand experience were supported: "this brand does not make you consider much"; and "your body is revitalised when you have consumed this brand". The findings of this study revealed that consumers do not think too much when they buy this brand and they also notice that their body is revitalised when they have consumed this brand, in the Thai context.

The indirect effect of ten items measuring of consumer brand experience on the overall consumer intention to continue buying this brand, rather than any alternative, via how this brand meets your overall current expectations are not supported. These variables include: "you find this brand interesting in a sensory way"; "this brand makes a strong impression on your visual sense or other senses"; "this brand appeal to your senses"; "this brand induces feelings and sentiments"; "you feel great using this brand"; "this brand is an emotional brand"; "this brand stimulates your curiosity and problem solving"; "you are engaged in a lot of thinking when you encounter this brand"; "this brand results in bodily

experience"; and "you have recognised this brand". The findings indicate that those scale items have no significant effect on the overall consumer intention to continue buying this brand, rather than any alternative. A possible reason could be that Thai consumers are concerned about how the current dietary supplements brand can solve their problems, rather than how they feel about the brand. Vitamins, minerals, and herbs or other botanicals are not commodity products, but consumers have consumed them because they expect their health to be better. As Horwath and Worsley (1989) observed, some users are willing to take appropriate supplements, even though they obtain sufficient nutrients from normal food intake.

7.2.3.5 Consumer expectations and consumer repurchase intentions of credence products

This section discusses how consumer expectations have a direct effect on consumer repurchase intentions of credence products (H18) tested by SEM is not accepted. The magnitude of this impact is not consistent with the research of Zeithaml *et al*. (1993), Gupta and Stewart (1996), Spreng *et al.* (1996), and Walker and Baker (2000), who reported that expectations directly impact on the consumer's pre-purchase behaviour and also indirectly on consumer's repurchase decisions and post-purchase behaviour.

The findings from the simple regression analysis suggest that how the brands meet consumer overall current expectations makes a significant contribution to the

overall intention to continue buying this product/brand (rather than an alternative). The multiple regression analysis reports that four hypotheses have a positive effect on the overall intention to continue buying this brand (rather than an alternative). Only two independent variables are supported, which are "this brand provides benefits corresponding to its price" and "your expectations are higher than before consuming it". As Schiffman and Kanuk (2004) observed, customers often purchase products again when they find that their expectations are met. Accordingly, customer expectations also depend on customer experience with products (Cadotte *et al*., 1987; Carman, 1990).

The other two items measuring in the rationales of consumer expectation that are not supported from the consumer brand perspective include: "this brand provides the dietary supplements level that you want to be offered"; and "your needs and wants are fulfilled by this brand". The results show that those two items have no relation to the overall intention to continue buying this brand (rather than an alternative). The current study found that with respect to dietary supplements as credence products, Thai consumers decline to repurchase a brand if current brands do not meet their consumer expectations.

Figure 7.1 shows the final model with SEM for each relationship of this study and summarises the results in the next section.

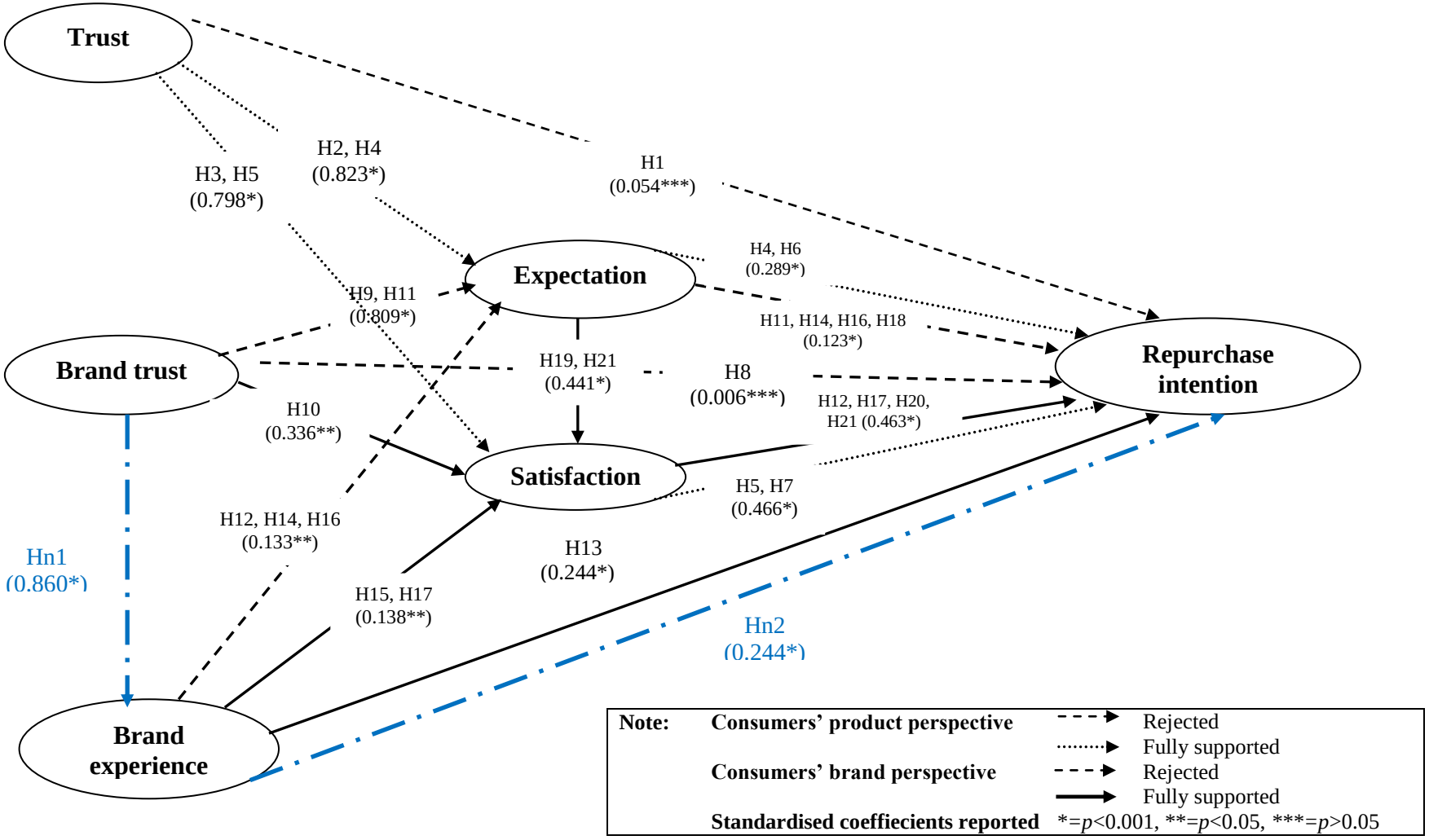


Figure 7.1 The results of the full P-PE model for repurchase intentions of credence products

7.3 The results of the full P-PE model for repurchase intentions of credence products

The study aims to test a consumer post-purchase evaluation model for repurchase intentions of credence products with respect to dietary supplements in Thailand. Given the current findings, consumers interact with both product and brand perspectives, drawing on the existing literature. The consumer product perspective explains the relationship between consumer trust, consumer expectation, consumer satisfaction, and consumer repurchase intentions. As for the consumer brand perspective, the study demonstrates a link between consumer brand trust, consumer brand experience, consumer expectation, consumer satisfaction, and consumer repurchase intentions. Consequently, this research presents a full P-PE model for repurchase intentions of credence products and hypothesis relationships, which is indicated by the standardized coefficient values from the SEM results in Figure 7.1.

In this model, the dashed arrows refer to rejected hypotheses, while the dotted arrows represent the supported hypotheses for the consumer product perspective at the significance level $p<0.05$. As for the consumer brand perspective, the dashed arrow refers to the rejected hypotheses, while the black arrow points to the supported hypotheses at the significance level $p<0.05$.

Surprisingly, the findings of consumers' brand perspective in Chapter 6 were that consumer brand trust and consumer brand experience are correlated (Hn1) and

brand experience has a mediating effect on the relationship between brand trust and repurchase intention by SEM testing (Hn2) (see Figure 7.1). However, these hypotheses were not specified in the hypotheses testing of the study because there was little credence products literature that mentioned these relationships. These results are found to be a significant contribution regarding P-PE for repurchase of credence products. Both hypotheses are special hypotheses relationships, with is reference to the Thai context.

7.4 Chapter summary

This chapter has discussed the hypotheses results in relation to the literature review. It addresses the hypotheses testing by SEM analysis, six of which were supported from the consumer product perspective (H2-H7), another ten hypotheses from the consumer brand perspective were also supported (H9-H10, H12-H15, H17, and H19-H21). Only five hypotheses (H1, H8, H11, H16, and H18) were rejected. In addition, the study also explains the regression analysis results by evaluating each of the independent variables and a single dependent variable as described in section 7.2. Key findings and contributions of this study are summarised in Table 7.1.

Table 7.1 Summary of key findings by structural equation modelling analysis

No.	Theoretical relationship	Key findings by structural equation modelling testing	
		Agree	Disagree
1	There is a relationship between consumer trust and consumer repurchase intentions.	-	This study disagrees with prior studies (Choi and Kim, 1996; Donio *et al.*, 2006; Eisingerich and Bell, 2007; Chiu *et al*., 2009, Ha *et al*., 2010), all of which confirm that trust plays an important role in repurchase intentions.
2	There is a relationship between consumer trust and consumer expectations.	The result shows that this hypothesis is consistent with prior studies (Rousseau *et al*., 1998; Sirdeshmukh *et al.*, 2002; Hsu and Cai, 2009), stating that trust and expectation are correlated.	-
3	There is a relationship between consumer trust and consumer satisfaction.	The key findings are consistent with the existing literature that consumer trust and consumer satisfaction are related (Selnes ,1998; Geyskens *et al*.,1999; Chiu *et al*., 2009; Randall *et al*., 2011; Kaveh, 2012).	-
4	Consumer expectations have a mediating effect on the relationship between consumer trust and consumer repurchase intentions.	From the consumers' product perspective, the findings are related to the definition of Sirdeshmukh *et al.* (2002) and that of Gardial *et al.* (1994), which suggest that consumers repurchase products if the product features respond to their needs.	-
5	Consumer satisfaction has a mediating effect on the relationship between consumer trust and consumer repurchase intentions.	The findings show that the relationship is correlated with the existing literature by Hirschman (1970), Fornell, (1992), Schutte and Ciarlante, (1998), Anderson (1994), Donjin *et al*. (2008) and Ha *et al*. (2010), all of which advocate that satisfaction affects consumer trust and consumer repurchase intentions.	-
6	There is a relationship between consumer expectations and consumer repurchase intentions.	The result of consumers' product perspective is consistent with prior studies (Zeithaml *et al.*, 1993; Gupta and Stewart, 1996; Spreng *et al*.,1996; Walker and Baker, 2000; Schiffman and Kanuk, 2004), who reported that expectations impact on consumer's repurchase decisions.	The finding of consumers' brand perspective disagrees with prior studies (Zeithaml *et al.*, 1993; Gupta and Stewart, 1996; Spreng *et al.*, 1996; Walker and Baker, 2000; Schiffman and Kanuk, 2004), who

No.	Theoretical relationship	Key findings by structural equation modelling testing	
		Agree	**Disagree**
			reported that expectations impact on consumer's repurchase decisions.
7	There is a relationship between consumer satisfaction and consumer repurchase intentions.	The finding is related to several prior studies that customer satisfaction has an impact on repurchase intentions (Hirschman, 1970; Oliver, 1980; Wilkie, 1994; Hennig-Thurau and Klee, 1997; Fornell, 1992; Anderson, 1994; Schutte and Ciarlante, 1998; Mittal and Kamakura, 2001; Yi and La, 2004; Bolton *et al.* , 2006; Donjin *et al*., 2008; Fornell *et al.*, 2010; Ha *et al*., 2010; Voss *et al.*, 2010; Kaveh, 2012).	-
8	There is a relationship between consumer brand trust and consumer repurchase intentions.	-	The magnitude of this impact is not correlated with prior studies, contending that brand trust has an impact on repurchase intention (Selnes, 1998; Singh and Sirdeshmukh, 2000; Chaudhuri and Holbrook, 2001).
9	There is a relationship between consumer brand trust and consumer expectations.	The result is consistent with the existing literature, for example a study by Delgado-Ballester *et al.* (2003) which suggest that consumers feel a general expectation of that brand. Similarly, expectation plays a vital role in consumer trust in brands (Barber, 1983).	-
10	There is a relationship between consumer brand trust and consumer satisfaction.	The findings of this study demonstrate that brand trust and customer satisfaction are positively correlated, which is consistent with prior studies (Chisnall, 1985; Urban *et al.*, 2000; Papadopoulou *et al.*, 2001; Delgado-Ballester *et al*., 2003; Ha and Perks, 2005; Seiders *et al*., 2005;Voss *et al*., 2010)	-
11	Consumer expectations have a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions.	-	The finding is not consistent with several studies (Zeithaml *et al*., 1993; Gupta and Stewart, 1996; Spreng *et al*., 1996;

No.	Theoretical relationship	Key findings by structural equation modelling testing	
		Agree	Disagree
			Walker and Baker, 2000), which suggest that consumer expectation indirectly impacts on consumer repurchase intentions.
12	Consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions.	This finding is understandable in terms of the high level of satisfaction in brand trust will lead consumers to a positive turning back to the products (Ha, 2004). Morgan and Hunt (1994) advocated that brand trust is related to satisfaction and can predict consumer future purchasing.	-
13	There is a relationship between consumer brand experience and consumer repurchase intentions.	The results indicate that consumer brand experience has a direct effect on consumer repurchase intentions. This is related to the existing literature (Singh and Sirdeshmukh, 2000; Hume *et al*., 2007; Zarantonello and Schmitt, 2010).	-
14	There is a relationship between consumer brand experience and consumer expectations	The result is consistent with Day (1977), who indicates that the rationale of choosing is that consumers consider which products or brands can respond to their needs or their life. It also agrees with Yi and La (2004) who observed that a different level of experience of brand has an effect on consumer expectations.	-
15	There is a relationship between consumer brand experience and consumer satisfaction.	The finding is consistent with the previous studies suggesting that brand experience has a significant effect on customer satisfaction (Reicheld, 1996; Day, 1977; Oliver, 1997; Ha and Perks, 2005; Brakus *et al*., 2009).	-
16	Consumer expectations have a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions.	-	The finding is not related to Santos and Boote (2000), who conceptualised the predicted standard expectation as core expectations, with reliance on consumers' own previous experiences, current experiences, and the experiences of others. Moreover, Slassi (2005) mentioned that the

No.	Theoretical relationship	Key findings by structural equation modelling testing	
		Agree	Disagree
			major reason for consumers to return to purchase a product again is that the brand offers tremendous quality.
17	Consumer satisfaction has a mediating effect on the relationship between consumer brand experience and consumer repurchase intentions.	This finding is related to the existing literature, which indicated that consumer satisfaction, brand experience, and repurchase intentions are related (Oliver, 1980; Cadotte *et al.*, 1987).	-
18	There is a relationship between consumer expectations on consumer satisfaction	The finding is related to the existing literature that customer satisfaction occurs after purchasing or consuming product and has a relationship with customer expectation (Anderson and Sullivan, 1993; Yi and La, 2004; Sarangapani and Mamatha, 2008). This results also support Oliver (1980, 1981) suggesting that levels of consumer satisfaction have an impact on consumer expectation	-
19	Consumer satisfaction has a mediating effect on the relationship between consumer expectations and consumer repurchase intentions.	The finding is consistent with prior studies, which demonstrated that the role of adjusted expectation is related to customer satisfaction and repurchase intention (Yi and La 2004).	-

Source: Researcher's fieldwork

The next chapter is the final chapter of this thesis, which summarises a major conclusion, contributions and implications, limitations of this study and suggestions for future research.

Chapter 8

Conclusions and contributions

8.1 Introduction

This chapter presents conclusions, contributions to knowledge and implications, including research limitations and suggestions for future study. A summary of the key research findings is elaborated in section 8.2; knowledge contributions are described in section 8.3; and managerial implications are presented in section 8.4. Research limitations and suggestions for future studies are addressed in section 8.5. The chapter is summarised in section 8.6.

8.2 Conclusions of key research findings

The empirical findings of this research take into account consumers' product perspective and consumers' brand perspective of P-PE model for repurchase intention, which provides evidence of the centrality of credence products in respect of dietary supplements with consumers in Thailand. The results show that sixteen of the hypotheses were supported with only five hypotheses rejected. Consumer perspective-related outcomes of the P-PE model for repurchase

intention agree with H2-H7 and H9-10, H12-H15, H17, H19-H21 while rejecting H1, H8, H11, H16, and H18 of the hypothesized relationships, which are based on structural equation modelling (SEM) and also indicated by goodness of fit (GOF) indices (see Chapter 6).

From the consumer product perspective, the factors that affect consumers' post-purchase evaluation with a direct impact on repurchase intention of credence products are consumer expectations and consumer satisfaction. The study points out that six hypotheses testing are supported: consumer trust has a direct effect on both consumer expectation and consumer satisfaction (H2 and H3), and consumer expectation and consumer satisfaction has a direct effect on repurchase intention of credence products (H6 and H7). As for a mediating effect, evidence shows that consumer trust and repurchase intention are associated with and mediated by consumer expectations of, or satisfaction with, credence products in the Thai context (H4 and H5). Only one hypothesis is not accepted, that is, consumer trust has no direct relation to repurchase intention of credence products (H1).

Likewise, from the consumers' brand perspective, consumer brand trust and consumer expectation have no direct effect on repurchase intention of credence products (H8 and H18) in this context. Instead, consumer brand experience, consumer satisfaction and consumer repurchase intentions are highlighted. Accordingly, the research results reveal that the factors with a direct impact on consumers' post-purchase evaluation for repurchase intention of credence products include consumer brand experience and consumer satisfaction (H13 and

H20). As for mediating effects, it is noted that consumer brand trust and consumer repurchase intention are associated with, and mediated by consumer satisfaction (H12). Similarly, consumer brand experience and consumer repurchase intention are also connected with, and mediated by consumer satisfaction (H17). On the other hand, consumer brand trust and consumer brand experience are not related to consumer repurchase intentions, when mediated by consumer expectation (H11 and H16).

Moreover, consumer brand trust and consumer brand experience also has a direct effect on consumer expectation and consumer satisfaction (H9, H10, H14, and H15). The results also confirm that consumer expectation and consumer satisfaction are related (H19). Specifically consumer satisfaction has a mediating effect on the relationship between consumer expectation and consumer repurchase intention of credence products in the Thai context (H21).

In other words, consumer brand experience was found to be the strongest factor. Also, consumer satisfaction was identified as the best mediating factor for repurchase intention regarding dietary supplements as credence products in the Thai consumer context.

In case of the multiple regression analysis, the study found that not only the P-PE factors (as mentioned above) cause consumers to repurchase the products, but there is also some important evidence relating to credence attributes. For consumers' product perspective, the findings show that consumers are concerned

about the credence characteristics of dietary supplements, particularly quality attributes, such good performance or quality of products, product safety, and the firm being renowned for addressing customers' needs. These points are necessary for consumers who repurchase the same product, rather an alternative. In addition, other factors affect consumers repurchase of products, such as consumers being satisfied with information content; the products fulfilling consumers' current expectations after consuming them (which are higher than before); and particularly that the products can solve problems or address concerns.

As for consumers' brand perspective, it is noteworthy that consumers intend to repurchase the same brand, rather than an alternative, with such conditions as: "the brands make them feel confident in, or satisfied with, the brand" and "the brand can solve their problems". Therefore, brand trust stems from consumer satisfaction with product performance and quality. Additionally, brand experience makes consumers repurchase the same brand, based on different levels of customer feeling and experience with the brand, particularly that "their body is revitalised when they have consumed this brand" and "the brand induces customer feelings and sentiments". Further, the overall consumer satisfaction with the brand (e.g. information content of the brand, quality of brand) and the brand meeting their overall current expectations are significant factors that affect consumers repurchasing the same brand (e.g. the brand provides benefits corresponding to its price). In addition, most consumers have faith in their chosen brand and believe that the current brand can solve their problems.

To sum up, the conceptual model has been developed by considering Western literature of post-purchase evaluation factors for repeat purchase behaviour and then tested with a Thai research sample. The current research results are able to address gaps in the literature and the context of the study gaps, as explained in Chapter 3. Firstly, there have been few studies on offline products from different consumers post-purchase evaluation perspectives (product and brand), specifically from the repurchase intentions point of view. The results contribute to the existing literature on consumer's post-purchase evaluation with reference to repurchase intention. The findings have clarified the conceptual model with key research findings, by indicating the hypothesis relationship test, which is summarised in Table 8.1. Secondly, little research has investigated the factors of post-purchase evaluation that may affect repurchase intention of credence products in Thailand. This is the first study, as far as the researcher is concerned, in the area of P-PE model for repurchase intention of credence products in the Thai context.

Therefore, consumer's post-purchase evaluation for repurchase intention of credence products with respect to dietary supplements bought by Thai consumers can be applied by using this model. The final P-PE model was demonstrated in Chapter 7 (see Figure 7.1) and explained in detail in section 7.3. The key findings make a particularly important contribution to the knowledge and managerial implications, which are elaborated in the next section.

Table 8.1 A summary of key determinants of consumers' perspective of P-PE factors for repurchase intentions of credence products

Variables	P-PE model for repurchase intentions of credence products	
	Consumers' product perspective	**Consumers' brand perspective**
Consumer trust ⟶ consumer repurchase intentions	Not accepted	-
Consumer trust ⟶ consumer expectations	Accepted	-
Consumer trust ⟶ consumer satisfaction	Accepted	-
Consumer expectations ⟶ consumer repurchase intentions	Accepted	Not accepted
Consumer satisfaction ⟶ consumer repurchase intentions	Accepted	Accepted
Consumer trust ⟶ consumer expectations ⟶ consumer repurchase intentions	Accepted	-
Consumer trust ⟶ consumer satisfaction ⟶ consumer repurchase intentions	Accepted	-
Consumer brand trust ⟶ consumer repurchase intentions	-	Not accepted
Consumer brand trust ⟶ consumer expectations	-	Accepted
Consumer brand trust ⟶ consumer satisfaction	-	Accepted
Consumer brand trust ⟶ consumer expectations ⟶ consumer repurchase intentions	-	Not accepted
Consumer brand trust ⟶ consumer satisfaction ⟶ consumer repurchase intentions	-	Accepted
Consumer brand trust ⟶ consumer brand experience ⟶ consumer repurchase intentions	-	Accepted
Consumer brand experience ⟶ consumer repurchase intentions	-	Accepted
Consumer brand experience ⟶ consumer expectations	-	Accepted
Consumer brand experience ⟶ consumer satisfaction	-	Accepted
Consumer brand experience ⟶ consumer expectation ⟶ consumer repurchase intentions	-	Not accepted
Consumer brand experience ⟶ consumer satisfaction ⟶ consumer repurchase intentions	-	Accepted
Consumer expectations ⟶ consumer satisfaction ⟶ consumer repurchase intentions	-	Accepted

Source: Researcher's fieldwork

8.3 Contributions to knowledge

This research investigates academic knowledge on post-purchase evaluation model for repurchase intentions and expands the theory. The study develops the conceptual models, grounded in the existing literature and conceptual models of Day (1977) , Oliver (1981), Richins (1983), Westbrook and Oliver (1991), Sheth *et al.* (1999), Singh and Sirdeshmukh (2000) , Delgado-Ballester *et al*. (2003),Yi and Gong (2009) and Ha *et al*. (2010). The conceptual model of P-PE for repurchase intentions of this study provides some generalisation for the two different consumers' perspectives: product and brand. This research extends the existing literature on consumer post-purchase evaluation in many aspects. Firstly, the existing literature suggests that from the consumers' product perspective, consumer trust has a significant direct effect on repurchase intentions (Choi and Kim, 1996; Eisingerich and Bell, 2007; Chiu *et al*., 2009; Ha *et al*., 2010); however, the present findings reveal that consumer trust has no significant direct effect on consumer repurchase intentions credence products in Thailand. On the other hand, the relationship between consumer trust and consumer repurchase intentions of credence product is visible, when mediated by consumer expectation and consumer satisfaction.

In addition, from the consumer brand perspective, the study points out that consumer brand trust has no significant effect on consumer repurchase intentions of credence products in the Thai context; thereby it is contradictory to the previous research of Morgan and Hunt (1994), Selnes (1998), Singh and

Sirdeshmukh (2000), Chaudhuri and Holbrook (2001) and Ha (2004). Moreover, consumer expectation has no direct impact on repurchase intention, which is inconsistent with prior studies (Zeithaml *et al.*, 1993; Gupta and Stewart, 1996; Spreng *et al.*, 1996; Walker and Baker, 2000; Schiffman and Kanuk, 2004). In terms of mediation effect of consumer expectation, the results reveal that consumer brand experience and consumer bran trust have no direct effect on repurchase intention when they are mediated by consumer expectation.

Nevertheless, "consumer satisfaction has a mediating effect on the relationship between consumer brand trust and consumer repurchase intentions of credence product" is accepted. In the meantime, consumer brand experience has a direct effect on consumer repurchase intentions (Schmitt, 1999; Singh and Sirdeshmukh, 2000; Hume *et al*., 2007). Furthermore, the other findings relating to the consumer brand perspective discover that the relationships between variables and consumer repurchase intentions are correlated. Therefore, these contributions highlight the importance of the relationship between variables, both directly and via mediation. Importantly, this study further suggests that consumer satisfaction is the strongest mediators of P-PE for repurchase intentions of credence products concerning dietary supplements in Thailand from both the consumer product perspective and the consumer brand perspective.

Moreover, the study found that consumer brand trust and consumer brand experience are correlated and brand experience has a mediating effect on the

relationship between brand trust and repurchase intention by SEM testing (see Figure 7.1). These findings were a new contribution made by the study.

Further, the findings also reveal that credence attributes with reference to dietary supplements in the Thai context affect consumer repurchase. Three main credence attributes of dietary supplements for Thai consumers were found: good performance or quality of products; trustworthy processing quality; and a guarantee by a third party organisation or government. Credence attributes also play a vital role in consumer satisfaction and consumer expectation and then lead to consumers repurchasing.

Based on the findings, the study also provides a comparison of socio-demographic data (e.g. regional and gender). In this study, the rural respondents attach more importance to rationale of consuming dietary supplements than the urban respondents. This may come from to the fact that rural respondents pay more attention to the benefits from health-related factors of credence products than those from urban areas. In particular, the mean values of the reason of reducing and preventing any risk of illness/disease (5.79 and 5.31, respectively) were relatively high (see Table 6.6). Further, the mean values of P-PE factors influencing the repurchase intention from the rural respondents was higher than those of the urban from both consumers' product and brand perspectives. In the meantime, females were more concerned about slowing the aging process rather than males (5.24 and 5.20, respectively) (see Table 6.6). It is important to have

such basic knowledge of demographic characteristics to fully understand the consumer behaviour of these four regions (Thailand: a vibrant market, 2005).

In addition, the knowledge contributions of this study are also beneficial for managerial aspects as these can be applied to the relevant public and business sectors, to be addressed in the next section.

8.4 Managerial implications

The present research concentrates on practical implications with specific areas of post-purchase evaluation (P-PE) factors influencing the repurchase intention of credence product behaviour. A major finding of this study is the P-PE model for repurchase intentions of credence products. In this regard, the managerial implications are related directly to the current developments of both private and public sectors in Thailand to be explained in the following section.

8.4.1 Managerial implications for public institutes

For the public institutes concerned, the managerial implications can be applied to policy developments in order to adapt their strategies for a better response to the upcoming of market challenges.

Firstly, a key implication of this study is that public agencies have to consider the importance of P-PE factors for the repurchasing, which would be useful for

developing marketing policies of credence products. In this model, relationships between factors and the repurchasing intention of credence products can be applied from two different consumer perspective concepts: product; and brand. The findings show that trust and brand trust alone have no direct impact on the repurchase intention. However, trust and brand trust affect consumers who repurchase the same products or brands when combined with such mediating factor as satisfaction. For the consumers' product perspective, expectation is an important mediating factor but it has no direct and indirect impact on repurchase intention from the consumer brand perspective. In the meanwhile, brand experience and satisafction are significant factors which directly impact on the repurchasing of credence products.

For this reason, the study suggests that firms should be concerned about direct effect of expectation and satisfaction on repurchase intention from the consumer product perspective. However, brand trust and expectation on repurchase intention from the consumer brand perspective are insignificant in this context. The findings indicate that managers should take brand experience and satisfaction factors into account for their consumer research or marketing strategies.

Secondly, these findings would provide fundamental knowledge of factors to the research and development (R&D) organisations of credence products which are responsible for doing cooperation of technology transfer's policy to relevant private sectors (e.g. the Thailand Institute of Scientific and Technological Research (TISTR)). In this situation, the contributions of this study will be

generalised to the ideas of the model to both marketers and scientists. For the scientific perspective, the scientists would be concerned about credence characteristic of products (e.g. health-related factors). They should pay attention to the different nutrients or ingredients of products (e.g. richness of vitamins, minerals, or herbs) by presenting some trustworthy health-related evidence for consumers or providing significant ingredients to confirm the safety of products from the key components of the issues (e.g. by a certification of toxicological or medical testing). In this case, the scientists can develop on the existing credence products or do research on new credence products by including those health-related factors to better respond to the target market of credence products. The confirmation of credence attributes from the scientists can support marketers or marketing researchers so they can guarantee that their products have been researched and developed on the model and market's needs, especially when credence products' technology is transferred to relevant credence product industries. This will enhance more cooperation with private organisations and lead to more potential to compete in the marketplace and subsequently more income for the firms.

Therefore, from the implications suggested above, the knowledge would be beneficial for marketers and scientists to better research and develop the products through the same direction of organisation's policy in response to the market demand.

Another key issue is credence attributes that have a vital role impact on the repurchasing of credence products, the study reveals that certification by a government agency is necessary for product trustworthiness because it offers a credible certification of credence products as well as classifies the products in the high or failure level of the market; thereby leading to consumer trust in the products and repurchase intention. Therefore, some public agencies that have a laboratory testing can rely on the existing laboratory testing or create a new one so as to provide credence attributes testing. Offering a strong credible certification of credence products will pave a way to increasing organisation's income and customers.

In summary, the P-PE model for the repurchasing intention of credence product in the Thai context is helpful for public sector because the public sector can pay greater attention to both product and brand perspectives in order to enhance a competitive edge on technology transfer and laboratory testing of credence products in both Thailand and Southeast Asia.

8.4.2 Managerial implications for the private sector

For the private sector, the results provide benefits for credence products or credence services industries, especially the dietary supplement ones by offering a post-purchase evaluation model for the repurchase intention of credence products in the Thai context as follows.

Firstly, a major contribution for marketers in managing of credence products is the knowledge that a quality or a good performance of product has a significant impact on consumer satisfaction and then lead to consumer repurchase intention of credence products in the Thai context. Marketers are able to the model to relevant theoretical frameworks and specific areas of expertise. This would reinforce the repurchasing power by keeping consumers satisfied and meeting consumer expectation with the quality of products. The product sales volume may increase from the repurchasing of the existing customers and from future purchases made by new customers.

Furthermore, brand experience factor is the strongest factor; it has a direct impact on the repurchase intention of credence products. This also stimulate consumer to recommend the brand of credence products to friends or family members. Specifically, the brand can induce feelings and sentiments of consumers, they feel great when using the brand, the brand dose not make them consider much, and their body is revitalised by consuming the credence product of this brand. Marketers can improve brand strategies by presenting these factors to their brand to better respond to Thai consumers in the current and future market situations. These outcomes offer marketers to devise branding or marketing strategies to make their brand stronger while encouraging the existing customers to repurchase and stimulate new customers to purchase in the future.

For example, the findings of consumers' product perspective in this study reveal that the credence attributes of vitamins, minerals, and herbs or other botanical

products have a crucial role in the repurchasing of credence products by showing three credence attributes (e.g. product has a good performance/quality; the quality control process of product is trustworthy; and the quality and safety are certified by third party organisations or governments). Thus, marketers should promote such credence attributes and make consumers believe that how the products are trustworthy and beneficial for their health. For these reasons, consumers may feel much more confident in buying products and consumers may trust credence attributes even if they cannot evaluate such attributes by their use of product (Darby and Karni, 1973).

Moreover, firms would also benefit from a better understanding of consumer repurchase intention behaviour in different areas like rural and urban ones in Thailand. Important reasons for consuming dietary supplements; for example, the findings reveal that mean values of rural respondents were greater than urban ones (e.g. keeping healthy and brand safety). Marketers can identify and segment the repurchasing level of customer groups into region. This is not only for segmentation of customers, but the results also provide demographic and geographic information, which help develop their marketing strategies to enhance consumer reasons of repurchase intention for particular demographic and geographic backgrounds.

In conclusion, the research outcomes will assist the private firms or marketers in combining their existing strategies with the more practical knowledge so as to gain more market shares of credence products.

Nevertheless, some limitations should be considered and improved by relevant future research.

8.5 Research imitations and suggestions for future research

The limitations of this study are classified in the following sections and suggestions for future research are elaborated in section 8.5.2.

8.5.1 Research limitations

The limitations are divided into two categories: conceptual and methodological.

8.5.1.1 Conceptual limitations

This study examines the P-PE factors influencing the repurchase intentions of credence products with respect to dietary supplements only. A conceptual model is based on the existing literature from (2002-2012) with research gaps as identified in Chapter 3. In particular, this study investigated the situation from 2010-2012. The study explored both product and brand factors associated with consumer perspectives influencing the repurchasing intention and then them tested through structural equation modelling and regression analysis with a total of the respondents. Therefore, the model may not respond to the some specific respondents' group perspective (e.g. age, gender or areas of data collection).

Moreover, credence products with respect of dietary supplements of this study refer to vitamins, minerals, and herbs or other botanicals in form of tablets and capsules. Thus, the results in this study are represented the context and the respondents only users who have consumed vitamins, minerals, and herbs or other botanicals in form of tablets and capsules. However, users who have consumed other the dietary supplements in other forms did not investigate.

8.5.1.2 Methodological limitations

There are some research methodological limitations as follows.

Firstly, limitations of the questionnaire; the researcher interviewed the respondents by a structured interview conducted face-to-face, which took a longer time to conduct with 504 respondents (504 sets of the questionnaire) than originally planned from July to mid October 2012. The researcher had to extend the survey to fifteen days, and then all questionnaires were completed at the end of October 2012. Moreover, the questionnaire was conducted with 25-30 minutes for the interview. Therefore, some sample respondents declined to be interviewed because it took too long.

Secondly, the selection of the respondents; elderly respondents did not consume the products during the past 12 months. Even they had tried the products; they did not continue consuming the products for more than 12 months. Moreover, some

respondents also said that they had consumed the dietary supplements to relieve diseases, which disqualified them from this study's selection criteria.

Thirdly, time and cost-consuming; the number of respondents and the schedule did not go as previously planned so the researcher needed to arrange the plan day-by-day. The study took effort to cover the data collection in four areas of Thailand and, as a consequence, twelve provinces were included. The study completed data collection in three months and fifteen days, which consumed both time and cost.

Finally, the selecting of provinces; twelve provinces were selected for the areas of this study on the basis of the top three provinces of average monthly expenditure from 2007-2011 (5 years) by region and province, according to the data generated by the National Statistic Organisation, Thailand. Therefore, the data may not be up-to-date at the present time.

8.5.2 Suggestions for future research

This study focuses on the relationship between P-PE factors influencing repurchase intentions of credence products with respect to dietary supplements in Thailand. Other interesting areas for future research, which have not yet been explored by this study, are suggested in what follows.

Firstly, the research investigated a challenging product of dietary supplements in Thailand by considering Western literature of P-PE factors influencing the repeat

purchase behaviour and tested with a Thai research sample; thereby the generalisation of results in terms of the representativeness of this study is limited. Nevertheless, the research simply suggests future research to investigate to confirm that this model is generalisable to other contexts or different respondents as well. It would be interesting to analyse P-PE model for repurchase intention of credence product groups or credence services across different cultures or different products; for example, the Southeast Asia market such as the Philippines, which is the world's highest-ranked country in terms of consuming dietary supplements (Nielsen Company Limited, 2009). By so doing, future research will be able to extend the P-PE model for repurchase intention to other international markets. Another interesting for future research is to extend the model is to compare the users of credence products between generation Y consumers and those from baby boom generation. Consumers belong to different age groups, their needs and wants for products and services are also different (Solomon *et al.*, 2002). Blackwell *et al.* (1995) advocated that attitudes of older consumers are distinguished from those of the younger that are often based on physical appearance.

Secondly, according to the P-PE factors, the study emphasised such interesting variables as consumer trust, brand trust, brand experience, expectation, satisfaction, and repurchase intentions by drawing on the existing literature, focus group discussions, and the situation from 2010 to 2012. As noted in the theoretical conceptual model, this finding focuses on two consumer perspectives: product; and brand. Therefore, future study may add some other factors and mediating

factors in order to investigate or compare across different factors through the same or different perspectives of P-PE model for repurchase intentions of credence products. For example, future research can be explored from personal, geographical, or brand name perspectives. According to the findings, three brands (Blackmore, Brand, and Amway) were ranked much higher than other brand names. Future research can extend the model by drawing on specific brand name perspectives. For other factors, future research should focus on social media factors (e.g. Facebook, Instragram), point of purchase factors (POP), word of mouth factors (WOM), social factors (e.g. reference group), or psychological factors (e.g. motivation or perception) . According to Plessis (2007)'s age of exponential choice, consumers or even customers have changed over time.

Finally, the study recommends a qualitative approach to future research such as in-depth interviews with managers of health shops or drug stores in order to gain their insights about the characteristic of the products and the customers. Another possibility is conducting an in-depth interview or a group discussion, which can classify respondents by category of dietary supplements (for example, vitamin users, mineral users, and herb or other botanical users). This may obtain more detail about the products and bring about sharper insights into the customer psyche. It would be interesting for future research to compare the findings by types of product from conducting in-depth interviews with specific supplement users, which can lead to a wide analysis of the consumers' mind and understand why they repurchase or consume credence products specific categories.

8.6 Chapter summary

The P-PE model for repurchase intentions of credence products in respect to dietary supplements in Thailand is a major contribution to knowledge. This model contributes to post-purchase evaluation and repurchase intention-related knowledge from both the consumers' product perspective and consumers' brand perspective of credence products in Thailand. In terms of managerial implications, this model is useful for credence products industries and government agencies to gain a better understanding of the post-purchase evaluation factors for repurchase intentions of credence products with respect to dietary supplements in Thailand.

The limitations of this study consist of both conceptual and methodological limitations. Three interesting areas for future research are proposed: firstly, investigations with aim to confirm that this model is generalisable to other contexts and different respondents. Secondly, future study may analyse some other factors and mediating factors in order to explore or compare across different factors through the same or different perspectives. Finally, future study could conduct a qualitative approach and examine from other perspectives of credence products, which will gain the data diversification.

References

Aaker, D.A. (1996) *Building strong brands*. New York: The Free Press.

Addis, M. and Holbrook, M. (2001) 'On the conceptual link between mass customization and experiential consumption: and explosion of subjectivity, *Journal of Consumer Behaviour*, 1 (1), pp. 50-66.

Alba, J. W. and Hutchinson, J. W. (1987) 'Dimensions of consumer expertise', *Journal of Consumer Research,* 13 (1), pp. 411-454.

Anastasi, A. and Urbina, S. (1997) *Psychological testing.* 7th edn. Upper Saddle River, New Jersey: Prentice Hall.

Anderson, R.E. (1973) 'Consumer dissatisfaction: the effect of disconfirmed expectancy on perceived product performance', *Journal of Marketing*, 10, pp. 38-44.

Anderson, J.G. and Anderson, J.L. (1991) 'Seafood quality: issues for consumer research', *Journal of Consumer Affairs,* 25 (1), pp. 144–163.

Andersen, E.S. and Philipsen, K. (1998) *The evolution of credence goods in customer markets: exchanging pigs in pokes*. Available at: http://www.business.aau.dk/~esa/evolution/esapapers/esa98/Credence.pdf (Accessed: 17 October 2012).

Anderson, E. and Sullivan, M. (1993) 'The antecedents and consequences of customer satisfaction for firms', *Marketing Science*, 12 (2), pp. 125-143.

Anderson, E.W. and Salibury, L.C. (2003) 'The formation of market-level expectations and its covariates', *Journal of Consumer Research*, 30 (1), pp. 115-124.

Andreasen, A.R. (1977) 'A Taxonomy of consumer satisfaction/dissatisfaction measures', *The Journal of Consumer Affairs*, 11, pp. 11-24.

Armstrong, G., Kotler, P., Harker, M. and Brennan, R. (2009) *Marketing and introduction*. Harlow: Pearson Education Limited.

Arora, R. (2006) 'Product positioning based on search, experience and credence attributes using conjoint analysis', *Journal of Product and Brand Management*, 15 (5), pp. 285-292.

Atchariyachanvanich, K., Okada, H. and Sonehara, N. (2006) 'What keeps online customers repurchasing through the Internet?', ACM SIGecom Exchanges, 6 (2), pp. 47-57.

Bagozzi, R. P., Wong, N. and Yi, Y. (1999) 'The role of culture and gender in the relationship between positive and negative affect', *Cognition and Emotion*. 13, pp. 641-672.

Bahia, K., Paulin, M. and Perrien, J. (2000) 'Reconciliating literature about client satisfaction and perceived service quality', *Journal of Professional Services Marketing*, 27 (2), pp. 21-41.

Barber, B. (1983) *The logic and limits of trust*. New Brunswick, NJ: Rutgers University Press.

Baron, R.M. and Kenny, D.A. (1986) 'The moderator-mediator variable distinction in social psychological research: conceptual, statistic, and statistical considerations', *Journal of Personality and Social Psychology*, 51 (6), pp. 1173-1182.

Bernard, T.W. (2000) 'Participatory research as emancipatory methods', in Burton, D. (ed.) *Research training for social scientists*. London:SAGE. pp. 167-185.

Bennett, R. and Thiele, R.S. (2004) 'Customer satisfaction should not be the only goal', *Journal of Services Marketing*, 18 (7), pp. 514-523.

Blackwell, R.D., Miniard, P.W. and Engel, J.F. (1995) *Consumer Behavior*. 8th edn. London: Dryden Press.

Blois, K.J. (1999) 'Trust in business to business relationships: evaluation of its status', *Journal of Management Studies*, 36 (2), pp. 197-215.

Boddy, C. (2005) ‘A rose by any other name may smell as sweet but group discussion is not another name for a focus group nor should it be’, *An International Journal*, 8 (3), pp. 248-255.

Bolton, L., Lemon, K.N. and Bramlett, M.D. (2006) ‘The effect of service experiences over time on a supplier’s retention of business customers’, *Management Science*, 52 (12), pp. 1811-1823.

Borgerson J. L. and Schroeder J. E. (2002) ‘Ethical issues of global marketing: avoiding bad faith in visual representation’, *European Journal of Marketing*, 36 (5/6), pp. 570 – 594.

Boulding, W., Ajay K., Staelin, R. and Zeithaml, V.A. (1993) ‘A dynamic process model of service quality: from expectations to behavioural intention’, *Journal of Marketing Research*, 30 (1), pp. 7-27.

Bower, G.H. and Forgas, J.P. (2001) ‘Mood and social memory’, in Forgas, J.P. (ed.) *The handbook of affect and social cognition*. New Jersey: Lawrence Erlbaum, pp. 95-120.

Boyer, R. (2008) ‘The quest for theoretical foundations of socio-economics: epistemology, methodology or ontology?’, *Socio-Economic Review,*, 6, pp. 733-770.

Brace, I. (2004) *Questionnaire design: how to plan, structure and write survey material for effective market research.* London: Kogen Page Limited.

Bradford, W.D. and Kleit, A.N. (2011) 'Can credence advertising effects be isolated? Can be negative?: evidence from pharmaceuticals', *Southern Economic Journal*, 78 (1), pp.167-190.

Brakus, J.J., Schmitt, B.H. and Zarantonello, L. (2009) 'Brand experience: what is it? How is it measured? Does it affect loyalty?', *Journal of Marketing*, 73, pp. 52-68.

Brand Age (2010) *Amway push Nutrilite Double X Brand to the trends health market* : *consumer product.* Available at: http://www.brandage.com (Accessed: 5 December 2010).

Braunsberger, K. and Munch, J.M. (1998) 'Source expertise versus experience effects in hospital advertising', *Journal of Service Marketing*, 12 (1), pp. 23-38.

Brodie, R. J., Whittome, J.R.M. and Brush, G.J. (2009) 'Investigating the service brand: a customer value perspective', *Journal of Business Research*, 62, pp. 345-355.

Brown, T.J., Barry, T.E., Dacin, A.P. and Gunst, R.F. (2005) 'Spreading the word: investigating antecedents of consumers' positive word of mouth intention and behaviour in retailing context', *Journal of the Academy of Marketing Science,* 33 (2), pp. 123-138.

Bryant, J.M. (2000) 'On sources and narratives in historical social science: a realist critique of positivist and postmodernist epistemologies' , *British Journal of Sociology,* 51 (3), pp. 489-523.

Bryman, A. (2008) *Social Research Methods*. 3th edn. New York: Oxford University Press Inc.

Bryman, A. and Bell, E. (2011) *Business research method.* 3th edn. New York: Oxford University Press Inc.

Burton, D. (2000) 'Sampling strategies in survey research', in Burton, D., (ed.) *Research Training for Social Scientists*. London: SAGE Publications Ltd. pp. 307-334.

Byrne, B.M. (2001) *Structural equation modeling with AMOS: basic concepts, applications, and programming*. New Jersey: Lawrence Erlbaum Associates, Publishers.

Cadotte, E.R., Woodruff, B.R. and Jenkins, L.R. (1987) 'Expectations and norms in models of consumer satisfaction', *Journal of Marketing Research*, 24, pp. 305-314.

Carman, J. (1990) 'Consumer perceptions of service quality: an assessment of the SERVQUAL dimensions', *Journal of Retailing*, 66 (1), pp. 33-55.

Carter, R. (1988) 'Some implications of beliefs for the public and private sectors', *Canadian Journal of Economics*, 4, pp. 775-784.

Caswell, J.A. and Mojduszka, E.M. (1996) 'Using informational labelling to influence the market for quality in food products', *American Journal of Agricultural Economics*, 78, pp. 1248-1253.

Chandon, P., Morwitz, V.G. and Reinartz, W.J. (2004) 'The short and long-term effects of measuring intent to repurchase', *Journal of Consumer Research*, 31 (3), pp. 566-572.

Chang, T.Z. and Wildt, A.R. (1994) 'Price, product information, and purchase intention: an empirical study', *Journal of the Academy of Marketing Science*, 22 (1), pp. 16-27.

Chaudhuri, A. and Holbrook, M.B. (2001) 'The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty', *Journal of Marketing*, 65, pp. 81-93.

Chisnall, M.P. (1985) *Marketing a behavioural analysis.* 2nd edn. Berkshire: McGRAW W-HILL Book Company Europe.

Chiu, C., Chang, C., Cheng, H. and Fang, Y. (2009) 'Determinants of customer repurchase intention in online shopping', *Online Information Review,* 33 (4), pp. 761-784.

Cho, Y., Im I., Hiltz, R. and Fjermestad, J. (2002) 'The effects of post-purchase evaluation factors on online vs. offline customer complaining behaviour: implications for customer loyalty', *Advances in Consumer Research*, 29, pp. 318-326.

Choi, C.J. and Kim, J. (1996) 'Reputation, learning and quality uncertainty', *Journal of Consumer Marketing*, 13 (5), pp. 47-55.

Cole, C., Laurent, G., Drolet, A., Ebert, J., Gutchess, A., Pandraund, L.R., Mullet, E., Norton, I. M. and Peters, E. (2008) 'Decision making and brand choice by older consumers', *Spring Science and Business Media* [Online]. Available at: http://www.carlsonschool.umn.edu/assets/125567.pdf (Accessed : 24 October 2010).

Collis, J and Hussey, R. (2009) *Business research: a practical guide for undergraduate and postgraduate students.* 3rd edn. Basingstoke :Palgrave Macmillian.

Comrey, A.L. and Lee, H.B. (1992) *A First Course in Factor Analysis.* 2nd edn. New Jersey: Routledge.

Comegys, C., Mika. H. and Jaani, V. (2006) 'Longitudinal Comparison of Finnish and US online shopping behavior among university students: the five-stage buying decision process', *Journal of Targeting, Measurement and Analysis for Marketing*, 14 (4), pp. 336-356.

Cooper, D.R. and Schindler, P.S. (2011) *Business research method*. 11th edn. New York:McGraw-Hill Higher Education.

Cote, J.A., Foxman, E.R. and Cutler, B.D. (1989) 'Selecting an appropriate standard of comparison for post-purchase evaluation', *Advances in Consumer Research*, 16, pp. 502-506.

Coulter, K.S. and Coulter, R.A. (2002) 'Determinants of trust in a service provider: the moderating role of length of relationship', *Journal of Service Marketing*, 16, pp. 35-50.

Creswell, J. (2009) *Research design: qualitative, quantitative, and mixed methods approaches.* 3rd edn. California: SAGE Publications, Inc.

Crow, I. (2000) 'The power of research ', in Burton, D., (ed.) *Research Training for Social Scientists*. London: SAGE Publications Ltd. pp. 68-80.

Crozier, R. and Ranyard, R. (1997) 'Cognitive process models and explanations of decision making', in Ranyard, R. , Crozier, R.W. and Svenson, O. (ed.) *Decision Making: Cognitive models and explanations*. Reprinted, London: Routledge. 1999. pp. 5-20.

Cunninggham, I.C.M., Hardy, A.P. and Imperia, G. (1982) 'Generic brands versus national brands and store', *Journal of Advertising Research*, 22, pp. 25-32.

Czaja, R. and Blair, J. (2005) *Designing surveys: a guide to decisions and procedures*. Pine Forge: Sage Publications.

Darby, M.R. and Karni, E. (1973) 'Free competition and the optimal amount of fraud', *Journal of Law and Economics*, 16 (1), pp. 67–88.

Day, R.L. (1977) 'Extending the concept of consumer satisfaction', *Advances in Consumer Research*, 4 (10), pp. 149-154.

Deighton, J. (1992) 'The consumption of performance', *Journal of Consumer Research*, 19, pp. 362-372.

Dejadin, A.K.and Bigotta, M. (2009) 'Paid work and gender: rural-urban and regional dimensions the FAO-IFAD-ILO Workshop on Gaps, trends and current research in gender dimensions of agricultural and rural employment: differentiated pathways out of poverty' Rome 31st March – 2nd April. Available at: http://www.fao-ilo.org/fileadmin/user_upload/fao_ilo/pdf/Papers/24_March/King_Dejardin_-_final.pdf. (Accessed: 11 September 2012).

Delgado-Bellester, E. (2004) 'Applicability of a brand trust scale across product categories: a multigroup invariance analysis', *European Journal of Marketing*, 38 (5/6), pp. 573-592.

Delgado-Bellester, E, Munuera-Alemán, J.S., and Yague-Guillén, M.J. (2003) 'Development and validation of a brand trust scale', *International Journal of Market Research,* 45 (1), pp. 35-54.

Deluca, D. and Kock, N. (2007) 'Publishing information systems action research for a positivist audience', *Communications of the Association for Information Systems*, 19, pp. 183-204.

Dentoni, D., Tonsor, G.T., Calantone R.J. and Peterson, H.C. (2009) 'The direct and indirect effects of 'Locally Grown'on consumers' attitudes towards agri-food Products', *Agricultural and Resource Economics Review,* 38 (3), pp. 384–396.

Denzin, N.K. and Lincoln, Y.S. (1994) *Handbook of Qualitative Research*. Thousand Oaks: SAGE Publications, Inc.

Devlin, J.K, Gwynne, A. L. and Ennew, C. T. (2002) 'The antecedents of service expectations', *Service Industries Journal*, 22, pp. 117-136.

Dholakia, R.R. and Zhao, M. (2010) 'Effects of online store attributes on customer satisfaction and repurchase intentions', *International Journal of Retail and Distribution Management,* 38 (7), pp. 482-496.

Dietary Supplement Health and Education Act (1994), Pub.L. No.103-417, 108 Stat.4325 (codified at 21 U.S.C. § 301 note).

Dillman, D.A. (2000) *Mail and internet surveys: the tailored design method*. New York: John Wiley & Sons, Inc.

Doney, P.M. and Cannon, J.P. (1997) 'An examination of the nature of trust in buyer-seller relationships', *Journal of Marketing,* 61 (2), pp. 35-51.

Dongjin, L., Shenghui, A. and Kai, Y. (2008) 'Exploring Chinese consumer repurchasing intention for services: and empirical investigation', *Journal of Consumer Behaviour,* 7, pp. 448-460.

Donio, J., Massari, P., and Passiante, G. (2006) 'Customer satisfaction and loyalty in a digital environment: an empirical test', *Journal of Consumer Marketing*, 23 (7), pp. 445-457.

Douglas, S.P. and Craig, S.C. (2007) 'Collaborative and iterative translation: an alternative approach to back translation', *Journal of International Marketing*, 15 (1), pp. 30-43.

Dullect, U. and Kerschbamer, R. (2006) 'On doctors, mechanics, and computer specialists: the economics of credence good', *Journal of Economic Literature*, 44, pp. 5-42.

Easterby-Smith, M., Thorpe, R. and Jackson, R. P. (2008) *Management research.* 3rd edn. London: SAGE Publications Ltd.

Eisingerich, A.B. and Bell, S.J. (2007) 'Maintaining customer relationships in high credence services', *Journal of Service Marketing*, 21 (4), pp. 253-262.

Emons, W. (1997) 'Credence goods and fraudulent experts', *RAND Journal of Economics*, 28 (1), pp. 107-119.

Engel, J., Kollat, D. and Blackwell, R. (1978) *Consumer Behavior*, 2nd edn. New York: Holt, Rinehart and Winston.

Euromonitor (2008) *Supplementing the future*. Available at : http://www.whatsnewiningredients.com (Accessed: 22 July 2010).

Evans, M., Jamal, A. and Foxall, G. (2006) *Consumer behaviour*. West Sussex: John Wiley and Son Ltd.

Evans, J.M., Moutinho, L. and Raaij, FV.W. (1996) *Applied consumer behaviour. Reprint,* Harlow: Addison-Wesley Publishing Company Inc., 1997.

Fang, Y.H., Chui, Y.M. and Wang, E.T.G. (2011) 'Understanding customers' satisfaction and repurchase intentions: an integration of IS success model, trust and Justice', *Internet Research*, 21 (4), pp. 479-503.

Field, A. (2009) *Discovering statistics using SPSS.* 3rd. Reprint .London: SAGE Publication Ltd.

Fontana, A. and Frey, J.H. (1994) 'Interview the art of science', in Denzin, N.K. and Lincoln, Y.S. (ed.) *Handbook of qualitative research*. Newbury Park, CA:SAGE. pp. 361-376.

Ford, G.T., Smith, D.B. and Swasy, J.L. (1990) 'Consumer scepticism of advertising claims testing hypotheses from economics of information', *Journal of Consumer Research*, 16, pp. 433-441.

Ford, G.T., Smith, D.B. and Swasy, J.L. (1988) 'An empirical test of the search, experience and credence attributes framework', *Advances in Consumer Research*, 15, pp. 239-243.

Fornell, C. (1992) 'A national customer satisfaction barometer: the Swedish experience', *Journal of Marketing*, 56, pp. 6-21.

Fornell, C., Rust, R.T. and Dekimpe, M.G. (2010) 'The effect of customer satisfaction on consumer spending growth', *Journal of Marketing Research* , XLVII, pp. 28-35.

Fournier, S. (1998) 'Consumers and their brands: developing relationship theory in consumer Research', *Journal of Consumer Research*, 24 (4), pp. 343-373.

Frost, D. Goode, S. and Hart, D. (2010) 'Individualist and collectivist factors affecting online repurchase intentions', *Internet Research,* 20 (1), pp. 6-28.

Ganesan, Shankar (1994) 'Determinants of long term orientation in buyer-seller relationships', *Journal of Marketing,* 58, pp. 1-19.

Gao, Z., T.C. Schroeder, and Yu, X. (2010) 'Consumer willingness to pay for cue attribute: the value beyond its own', *Journal of International Food and Agribusiness Marketing,* 22 (1), pp. 108–124.

Gapper, J. (2004) 'The challenge of turning a brand into an object of love', *financial times*, 23. p. 23.

Gardial, F.S., Clemons, S. D., Woodruff, B. R., Schumann, W. D. and Burns, J. M. (1994) 'Comparing consumers' recall of prepurchase and postpurchase product evaluation experience', *Journal of Consumer Research*, 20, pp. 548-560.

Garry, T. (2007) 'Consumer sophistication and the role of emotion on satisfaction judgments within credence services', *Journal of Consumer Behaviour,* 6, pp. 383-397.

Gayle, V. (2000) 'Descriptive statistics', in Burton, D. (ed.) *Research Training for Social Scientists*. London: SAGE Publications Ltd. pp. 363-384.

Geyskens, I., Steenkamp, J.E.M., and Kumar, N. (1999) 'A Meta-Analysis of satisfaction in marketing channel relationships', *Journal of Marketing Research,* XXXVI, pp. 223-238.

Gilly, M.C. (1979), 'Complaining Consumers: their satisfaction with organizational response', in Day, R.L. and Keith Hunt, H. (ed.) *New Dimensions of Consumer Satisfaction and Complaining Behavior.* Bloomington, Indiana: Department of Marketing, Indiana University. pp. 99-102.

Godfrey, D. and Richardson, D. (2002) 'Vitamins and minerals for health', *British Food Journal*. 104 (11), pp. 913-933.

Golembiewski, R. and McConkie, M. (1975) 'The centrality of trust in group Processes', in Cooper, C. L. (ed.) *Theories of group processes.* New York: John Wiley, pp. 131-185.

Grace, D. and O'Cass, A. (2004) 'Examining service experiences and post-consumption evaluations', *Journal of Service Marketing*, 18 (6), pp.450-461.

Grewal, D., Iyer, G. R., Gotlieb, J. and Levy, M. (2007) 'Developing a deeper understanding of post-purchase perceived risk and behavioural intentions in a service setting', *Academy of Marketing Science*, 35, pp. 250-258.

Grolleau, G. (2002) 'Proliferation and content diversity of environmental claims: an explanatory analysis applied to agro-food products', *Applied Economics Letters*, 9, pp. 343-346.

Gupta, K. and Stewart, D. (1996) 'Customer satisfaction and customer behavior: the differential role of brand and category expectations', *Marketing Letters*, 7 (3), pp. 249-263.

Ha, H. (2004) 'Factors influencing consumer perceptions of brand trust online' *Journal of Product and Brand Management*, 13 (5), pp. 329-342.

Ha, H. and Perks, H. (2005) 'Effect of consumer perceptions of brand experience on the web: brand familiarity, satisfaction and brand trust', *Journal of Consumer behaviour*, 4 (6), pp. 438-542.

Ha, H., Janda, S. and Muthaly, S.K. (2010) 'A new understanding of satisfaction model in e-re-purchase situation', *European Journal of Marketing*, 44 (7/8), pp. 997-1016.

Haddad, L. (1996) 'The characteristics of decision making in a well-Functioning economy', *International Journal of Social Economics*, 23(4/5/6), pp. 207-220.

Hahn, S. (2004) 'The advertising of credence goods a signal of product quality' *The Manchester School*, 72 (1), pp. 50-59.

Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010) *Multivariate data analysis*. New Jersey: Pearson Prentice Hall.

Hansen, T. (2005) 'Understanding consumer perception of food quality: the cases of shrimps and cheese', *British Food Journal*, 107 (7), pp. 500-525.

Harkness, J.A. (2003) 'Questionnaire Translation,', in Harkness, J.A., Vijver, F.J.R. van de, and Mohler, P.P. (ed.) *Cross cultural survey methods*, New York: John Wiley and Sons, pp. 35–56.

Havlena, W.J. and Holbrook, M.B. (1986) 'The varieties of consumption experience: comparing two typologies of emotion in consumer behaviour', *Journal of Consumer Research*, 13, pp. 394-404.

Hawkins, I.D., Mothersbaugh, L.D. and Best, J.R. (2007) *Consumer behavior: building marketing strategy.* 10th edn. New York: The McGRAW-Hill Companies, Inc.

Helgesen, Ø. (2006) 'Are loyal customers profitable? Customer satisfaction, customer (action) loyalty and customer profitability at the individual level', *Journal of Marketing Management*, 22, pp. 245 – 266.

Hellier, P.K., Geursen, G.M., Carr, R.A. and Rickard, J.A. (2003) 'Customer repurchase intention: a general structural equation model', *European Journal of Marketing*, 37 (11), p. 1762.

Hennig-Thurau, T. and Klee, A. (1997) 'The impact of customer satisfaction and relationship quality on customer retention: a critical reassessment and model development', *Psychology and Marketing*, 14 (8), pp. 737-64.

Heskett, J.L., Sasser, W.E., and Hart, C.W.L. (1990) *Breakthrough Service*. New York: The Free Press.

Hirschman, A.O. (1970). *Exit, voice, and loyalty responses to decline in firms, organizations and states.* Cambridge, MA: Harvard University Press.

Hirschman, E.C. (1986) 'Humannistic inquiry in marketing research: philosophy, method, andcriteria', *Journal of Marketing Research*, 23, pp. 237-249.

Holdaway, S. (2000) 'Theory and method in qualitative research', in Burton, D. (ed.) *Research Training for Social Scientists*. London: SAGE Publications Ltd., pp. 156-185.

Holmbeck, G.N. (1997) 'Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: examples from the child-clinical and pediatric psychology literature', *Journal of Consulting and Clinical Psychology*, 4, pp. 599-610.

Homburg, C., Koschate, N. and Hoyer, W.D. (2005) 'Do satisfied customers really pay more? a study of the relationship between customer satisfaction and willingness to pay', *Journal of Marketing*, 69, pp. 84-96.

Horwath, C.C. and Worsley, A. (1989) `Dietary-supplement use in a randomly Selected group of elderly Australians: results from a large nutrition and health survey', *Journal of the American Geriatrics Society*, 37, pp. 689-696.

Hosmer, L.T. (1995) 'Trust: the connecting link between organizational theory and philosophical ethics', *Academy of Management Review*, 20 (2), pp. 379-403.

Howcroft, B. and Beckett, A. (1996) 'Branch networks and the retailing of high credence products', *International Journal of Bank Marketing*, 14 (4), pp. 3-11.

Hoyer, D.W (1984) 'An examination of consumer decision making for a common repeat purchase product', *Journal of Consumer Research*, December [Online]. Available at: http://www.jstor.org/pss/2489071 (Accessed: 22 October 2010).

Hsu, C. and Cai, L.A. (2009) 'Brand knowledge, trust and loyalty – a conceptual model of destination branding' *International CHRIE Conference-Refereed Track.*. 31st July 2009. Available at: http://scholarworks.umass.edu/refereed/Sessions/Friday/12 (Accessed: 7 January 2013).

Hu, L.T. and Bentler, P.M. (1999) 'Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives', *Structural Equation Modeling*, 6, pp. 1-55.

Hughes, J. and Sharrock, W. (1997) *The philosophy of social research*. 3rd edn. Harlow: Addison Wesley Longman Limited.

Hume, M. and Mort, S. (2010) 'The consequence of appraisal emotion, service quality, perceived value and customer satisfaction on repurchase intent in the performing arts', *Journal of Service Marketing*, 24 (2), pp. 170-182.

Hume, M., Mort, G.S. and Winzar, H. (2007) 'Exploring repurchase intention in a performing arts context: who comes? and why do they come back', *International Journal of Nonprofit and Voluntary Sector Marketing*, 12, pp. 135-148.

Jacoby, J. and Chestnut, R.W. (1978) *Brand loyalty: measurement and management.* New York: John Wiley & Sons.

Jennings, G. (2010) *Tourism research*. 2nd edn. Milton: John Wiley & Sons Australia, Ltd.

Johnson, P. and Harris, D. (2002) 'Qualitative and quantitative issues in research design', in Partington, D. (ed.) *Essential skill for management research.* London: SAGE Publications Ltd. pp. 99-116.

Kardes, R.F., Cline, W.T. and Cronley, L.M. (2008) *Consumer behavior: science and practice*. South-Western: Cengage Learning.

Karstens, B. and Belz, F. (2006) 'Information asymmetries, labels and trust in the German food market: a critical analysis based on the economics of information', *International Journal of Advertising*. 25 (2), pp. 189-211.

Kasikorn Research Company Limited (2004) 'Behaviour of herbal dietary supplement', *K-Econ Analysis* [Online]. Available at: http://www.kasikornresearch.com/TH/K-Econ%20Analysis/Pages/ViewSummary.aspx?docid=10100 (Accessed: 5 December 2010).

Kasikorn Research Company Limited (2007) 'Direction of dietary supplement in 2008', *K-Econ Analysis* [Online]. Available at: http://www.kasikornresearch.com/TH/K-Econ%20Analysis/Pages/ViewSummary.aspx?docid=10100 (Accessed: 22 July 2010).

Kavali, S.G., Tzokas, N.X., and Saren, M.J. (1999) 'Relationship marketing as an ethical approach: philosophical and managerial considerations', *Management Decision,* 37 (7), pp. 573-581.

Kaveh, M. (2012) 'Role of trust in explaining repurchase intention', *African Journal of Business Management,* 6 (14), pp. 5014-5025.

Kelly, S.W. and Schwardz, R.W. (2005) 'A marketing-Oriented perspective on physician selection', *Surgical Innovation,* 12 (4), pp. 357-363.

Kent, G. (2000) 'Ethical principle', in Burton,D. (ed.) *Research training for social scientists*. London: SAGE Publications Ltd., pp. 61-67.

Kim, D.J., Ferrin, D.L. and Rao, H.R. (2009) 'Trust and satisfaction, two stepping stones for successful e-commerce relationships: a longitudinal exploration' *Information Systems Research*, 20 (2), pp. 237-257.

Kirmani, A. and Wright, P. (1989) 'Money talks: perceived advertising expense and expected product quality', *Journal of Marketing*, 57, pp. 1-22.

Kincade, D.H., Giddings, V.L. and Chen-Yu, J.H. (1998) 'Impact of product-specific variables on consumers' post-consumption behaviour for apparel products: USA', *Journal of Consumer Studies and Home Economics*, 22 (2), pp. 81-90.

Kline, R.B. (2005) *Principle and practice of structural equation modeling*. 2nd edn. New York: Guilford Publications, Inc.

Kola, J. and Latvala, T. (2003) 'Impact of information on the demand for credence characteristics', *International Food and Agribusiness Management Association.* 5 (2) [Online]. Available at: http://ageconsearch.umn.edu/bitstream/34531/1/0502la01.pdf (Accessed: 11 September 2012).

Kotler, P. and Armstrong, G. (2011) *Marketing: an introduction*. Boston; Harlow: Pearson.

Kress, E.V. and Shoffner, F.M. (2007) 'Focus groups: a practical and applied research approach for counsellors', *Journal of Counselling and Development*, 85, pp. 189-195.

Krueger, R.A. (1994) *Focus groups: a practical guide for applied research*. Thousands Oaks, CA: SAGE.

Krouse, C. G. (1990) *Theory of Industrial Economics.* Cambridge, Mass. and Oxford: Blackwell.

Kunnan, A.J. (1998) 'An introduction to structural equation modelling for language assessment research', *Language Testing*, 15(3), pp. 295-332.

Lau, G.T. and Lee, S.H. (1999) 'Consumers' trust in a brand and the link to brand loyalty', *Journal of Market Focused Management*, 4, pp. 341-370.

Lawson, T. (2003) *Reorienting Economics*. London: Routledge.

Lederman,L.C. (1990) 'Assessing educational effectiveness: the focus group interview as a technique for data collection', *Communication Education*, 39 (2), pp. 117-127.

Lee, C.H., Eze, U.C. and Ndubisi, N.O. (2011) 'Analyzing key determinants of online repurchase intentions', *Asia Pacific Journal of Marketing and Logistics*, 23 (2), pp. 200-221.

Lewin, C. (2011) 'Understanding and describing quantitative data' in Somekh, B. and Lewin, C. (ed.) *Theory and Methods in Social Research. 2nd edn.* London: SAGE Publications Ltd. pp. 220-230.

Lewis, P.V. and Speck, H.E. (1990) 'Ethical orientations for understanding business ethics', *The Journal Of Business Communication*, 27 (3), pp. 213-232.

Li, Q. (2010) 'Exploring the relationship between customer related measures and shareholder value', *Social Behaviour and Personality*, 38 (5), pp. 647-656.

Li, F., Zhou,N., Kashyap, R. and Yang,Z. (2007) 'Brand trust as a second-order Factor: an alternative measurement model', *International Journal Of Marketing Research*, 50 (6), pp.817-839.

Lilijander, V. and Mattsson, J. (2002) 'Impact of customer preconsumption mood on the evaluation of employee behaviour in service encounters', *Psychology and Marketing*, 19 (10), pp. 837-857.

Lin, L. and Chen, Y. (2009) ‘A study on the influence of purchase intentions on repurchase decisions: the moderating effects of reference groups and perceived risks’, *Tourism Review*, 64 (3), pp. 28-48.

Lou, X. and Homburg, C. (2007) ‘Neglected outcomes of customer satisfaction’, *Journal of Marketing*, 71, pp. 133-149.

Loureiro, M.L. and Lotade, J. (2005) ‘Do fair trade and eco-labels in coffee wake up the consumer conscience?’, *Ecological Economics*, 53(1), pp. 129-138.

Luk, S.TK. and Yip, L.S.C. (2008) ‘The moderator effect of monetary sales promotion on the relationship between brand trust and purchase behaviour’, *Brand Management*, 15 (6), pp. 452-464.

Lusk, J.L., Roosen, J. and Fox, J.A. (2003) ‘Demand for beef from cattle administered growth hormones or fed genetically modified corn: a comparison of consumers in France, Germany, the United Kingdom, and the United States’, *American Journal of Agricultural Economics*, 85 (1), pp. 16-29.

Lymperopulos, C., Chaniotakis, L.E. and Rigopoulou, I.D. (2010) ‘Acceptance of detergent-retail brands: the role of consumer confidence and trust’, *International Journal of Retail and Distribution Management*, 38 (9) pp. 719-736.

Mabiso, A., J. Sterns, L. House, and A. Wysocki. (2005) 'Estimating consumers' willingness-to-pay for country-of-origin labels in fresh apples and tomatoes: a Double-Hurdle Probit Analysis of American data using factor scores', *The American Agricultural Economics Association Annual Meeting*, Rhode Island 24th -27th July [Online]. Available at: http://ageconsearch.umn.edu/bitstream/19418/1/sp05ma06.pdf (Accessed: 11 September 2012).

MacCallum, R.C., Browne, M.W., and Sugawara, H.M. (1996) 'Power analysis and determination of sample size for covariance structure modelling.', *Psychological Methods*, 1, pp. 130-149.

Mack, L. (2010) 'The philosophical underpinnings of educational research', *Polyglossia*, 19, pp. 5-11.

Mano, H. and Oliver, R. L. (1993) 'Assessing the dimensionality and structure of the consumption experience: evaluation, feeling, and satisfaction', *Journal of Consumer Research*, 20, pp. 451 – 466.

Martins, N. (2009) 'Rules, social ontology and collective identity', *Journal for the Theory of Social Behaviour*, 39 (3), pp. 323-344.

Mason, P. (2001) *Dietary supplements.* 2nd edn. London: Pharmaceutical Press.

Mason, M.J., Scammon, D.L. and Fang, X. (2007) 'The impact of warnings, disclaimers, and product experience on consumers' perceptions of dietary supplements', *The Journal of Consumer Affairs.* 41 (1), pp. 74-99.

Matichon (2011) 'Trend of health food 2012' 14 December [Online], Available at: http://www.matichon.co.th/news_detail.php? (Accessed: 12 April 2012).

Mattila, A.S (2003) 'The impact of cognitive inertia on post consumption evaluation processes', *Journal of the Academy of Marketing Science*, 31 (3), pp. 287-299.

McAllister, D. J. (1995) 'Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations', *Academy of Management Journal*, 38, pp. 24-59.

McGregor, S, L, T. and Murnane, J.A. (2010) 'Paradigm, methodology and method: intellectual integrity in consumer scholarship', *International Journal of Consumer Studies,* 34, pp. 419-427.

McNeill, P. and Chapman,S. (2005) *Research methods.* 3rd edn. Oxon: Routledge.

Meadows, M. (2004) 'Ensuring the safety of dietary supplements', *FDA Consumer*, pp. 10-11.

Meahnmatr, A. (2007) **'**Dietary supplements', *Exclusive* [Online] Available at: http://www.positioningmag.com/Magazine/Details.aspx? (Accessed: 2 December 2010).

Mitra, K., Reiss, M.C. and Capella, L.M. (1999) 'An examination of perceived risk, Information search and behavioral intentions in search, experience and credence services', *Journal of Services Marketing*, 13(3). pp. 208-228.

Mittal, V. and Kamakura, W.A. (2001) 'Satisfaction, repurchase intent, and repurchase behaviour : investigating the moderating effect of customer characteristics' *Journal of Marketing Research*, 38, pp. 131-142.

Mondelaers, K., Verbeke,W. and Huylenbroeck,G.V. (2009) 'Importance of health and environment as quality traits in the buying decision of organic products', *British Food Journal*, 111 (10), pp. 1120-1139.

Moorman, C., Zaltman, G. and Dashpade, R. (1992) 'Relationships between providers and users of market research: the dynamics of trust within and between organizations', *Journal of Marketing Research*, 29, pp. 314–328.

Morgan, D. (1988) *Focus group as qualitative research*. Beverly Hills: Sage Publications.

Morgan, D. L. (2007) 'Paradigms lost and pragmatism regained', *Journal of Mixed Methods Research*, 1 (1), pp. 48-76.

Morgan, R.M. and Hunt, S.D. (1994) 'The commitment-trust theory of relationship marketing', *Journal of Marketing*, 54, pp. 36-51.

Moser, R., Raffaelli, R. and McFadden, D.T. (2011) 'Consumer preferences for fruit and vegetables with credence-based attributes: a review', *International Food and Agribusiness Management Review*, 14 (2), pp. 121-142.

Murphy, G. and Smith, E. (1982) 'Basic-level superiority in picture categorization', *Journal of Verbal Learning and Verbal Behaviour*, 21, pp. 1-20.

Myers, G. (1998) 'Displaying opinions: topics and disagreement in focus groups', *Language in Society*, 27, pp. 85-111.

Nagler, M., Kronenberg, F., Kennelly, E. and Jiang, B. (2009) 'How do consumers value a credence good? a hedonic analysis of black cohosh dietary supplements'. Available at: http://www.cide.info/conf/2009/iceee2009_submission_39.pdf (Accessed: 11 September 2012).

Nagler, M., Kronenberg, F., Kennelly, E. and Jiang, B. (2011) 'Pricing for a credence good: an exploratory analysis', *Journal of Brand and Product Management*, 20 (3), pp. 238-249.

National Health Service (2011) *Supplements who needs them?* Available at: http://www.nhs.uk/news/2011/05May/Documents/BtH_supplements.pdf (Accessed: 4 November 2012).

Nayga, R.M. and Reed, D.B. (1999) 'Factors associate with the intake of dietary supplements', 12 (1), pp. 43-48.

Nelson, P. (1974) 'Advertising as information', *Journal of Political Economy,* 82, pp. 729-754.

Neuman, W.L. (2006) *Social Research Methods: quantitative and Qualitative Approaches*. Boston: Pearson Education,Inc.

Nielsen Company (Thailand) Limited (2009) 'Thai consumers top the world in consuming vitamin/dietary supplements', *Trends and Insights* [Online]. Available at: http://th.nielsen.com/news/20090317.shtml (Accessed: 29 July 2010).

Noordewier, T.G., John G. and John R. Nevin (1990) 'Performance outcomes of purchasing arrangements in industrial buyer-vendor relationships', *Journal of Marketing,* 54, pp. 80-93.

Northen, J.R. (2000) 'Quality attributes and quality cues effective communication in the UK meat supply chain' *British Food Journal,* 102 (30), pp. 230-245.

Oates, C. (2000) 'The use of focus groups in social science research', in Burton, D., (ed) *Research training for social scientists*. London: SAGE. pp. 167-185.

Oh, H.M. and Jeong, M.Y. (2004) 'Moderating effects of travel purpose and past experience on the relationship between product performance and lodging repurchase', *Journal of Hospitality and Leisure Marketing*, 11 (2/3), pp. 139-158.

Oliver, R.L. (1980) 'A cognitive model of the antecedents and consequences of satisfaction decisions', *Journal of Marketing* Research, 17, pp. 460-469.

Oliver, R.L. (1981) 'Measurement and evaluation of satisfaction process in retail settings', *Journal of Retailing*, 57 (3), pp.25-48.

Oliver, R.L. (1997) *Satisfaction: a behavioural perspective on the consumer.* Boston: Irwin/McGraw-Hill companies, Inc.

Oliver, R.L. (1999) 'Whence consumer loyalty?', *Journal of Market Research*, 63 (4), pp. 33-44.

Olynk, N.J., Tonsor, G.T. and Wolf, C.A. (2010) 'Verifying credence attributes in live stock production' *Journal of Agricultural and Applied Economics*, 42 (3), pp. 439-452.

Padgett, D. and Allen, D. (1997) ‘Communicating experiences: a narrative approach to creating service brand image’, *Journal of Advertising*, 26(4), pp.49-62.

Palmer, A. (2009) *Introduction to marketing: theory and practice*.2nd edn. Oxford: Oxford University Press.

Papadopoulou, P., Andreou, A., Kanellis, P. and Martakos, D. (2001) 'Trust and relationship building in electronic commerce', *Internet Research: Electronic Networking Applications and Policy*, 11 (4), pp. 322-332.

Papadopoulou, P., Kanellis, P. and Martakos, D. (2002) 'Trust formation and relationship building in electronic servicecapes', *ECIS*, pp. 1487-1497.

Parasuraman, A., Zeithaml, V.A. and Berry, L.L. (1988) ‘SERVQUAL: a multiple items scale for measuring consumer perceptions of service quality, *Journal of Retailing*, 64, pp. 12-40.

Park, I. Bhatnagar, A. and Rao, H. R. (2010) ‘Assurance seals, on-line customer satisfaction, and repurchase intention’, *International Journal of Electronic Commerce*, 14 (3), pp. 11-34.

Patterson, P.G. (2004), ‘A contingency model of behavioural intentions in a service context’, *European Journal of Marketing*, 38, pp. 1304-1315.

Patterson, P., Johnson, L. and Spreng, R. (1997) "Modeling the determinants of customer satisfaction for business-to-business professional services", *Journal of the Academy of Marketing Science*, 25 (1), pp. 4-17.

Peterson, R. (1998) 'Trust for quality' *TQM Magazine,* 10 (6), pp. 413-416.

Petrocelli, J.V. (2003) 'Hierarchical multiple regression in counseling research: common problems and possible remedies', *Measurement and Evaluating in Counseling and Development*, 36, pp. 9-22.

Plessis, D.F. (2007) 'Introduction and overview', in Plessis, D.F. and Rousseau, D (ed.) *Buyer behaviour: Understanding consumer psychology and marketing*. 4th edn. Reprinted, Cape Town: Oxford University Press South Africa. 2007. pp. 3-15.

Ponterotto, J.G. (2005) 'Qualitative research in counseling psychology: a primer on research paradigms and philosophy of science', *Journal of Counseling Psychology*, 52 (2), pp. 126–136.

Poon, J. P. H. (2006) 'Quantitative methods: not positively positivist' *Progress in Human Geography*, 29 (6), pp. 766-772.

Prenshaw, P. J., Kovar, S.E. and Burke, K.G. (2006) 'The impact of involvement on satisfaction for new, nontraditional, credence-based service offerings', *Journal of Service Marketing*, 20 (7), pp. 439-452.

Prince, M. and Davies, M. (2001) 'Moderator teams: an extension to focus group methodology', *Qualitative Market Research: An International Journal*, 4 (4), pp. 207-216.

Quintal, V.A. and Polczynski, A. (2010) 'Factors influencing tourists' revisit intentions', *Asia Pacific Journal of Marketing and Logistics*, 22 (4), pp. 554-578.

Randall, W. S., Gravier, M. J. and Prybuto, V. R. (2011) 'Connection, trust, and commitment: dimensions of co-creation?' *Journal of Strategic Marketing*, 19 (1), pp. 3-24.

Ray, S., Ow, T. and Kim, S.S. (2011) 'Security assurance: how online service providers can influence security control perceptions and gain trust' *Decision Sciences Journal*, 42 (2), pp. 391-411.

Reicheld, F. (1996) *The loyalty effect: the hidden force behind growth, profits, and lasting value*. Boston: Harvard Business School Press.

Remenyi, D., Williams, B., Money, A. and Swartz, E. (1998) *Doing research in business and management : an introduction to process and method.* London: SAGE Publications Ltd.

Rescher, N. (2006) 'Optimalism and the rationality of the real: on the prospects of axiological explanation' *The Review of Metaphysics,* 59, pp. 503-516.

Richins, M. (1983) 'Negative word of mouth by dissatisfied consumers: a pilot study', *Journal of Marketing,*47 (1), pp. 68-78.

Richins, M.L. (1997) 'Measuring emotions in consumption experience', *Journal of Consumer Research,* 24, pp.127-146.

Rijswijk, W. and Frewer, L. J. (2008) 'Consumer perceptions of food quality and safety and their relation to traceability', *British Food Journal,* 110 (10), pp. 1034-1046.

Robert, C. (2007) 'Mixing modes of data collection in surveys: A methodological Review', *ESRC National Centre for Research Methods Briefing Paper,* pp. 4-26.

Robson, C. (2002) *Real world research: a resource for social scientists and practitioner-researchers*. Oxford: Blackwell publisher.

Rosa, F., Sanches, M. and Barrena, R. (2006) 'Trust in label information to recuperate consumer's confidence for meat: a compared analysis among Canada, Italy, and Spain' *Trust and Risk in Business Networks*, Germany 8th -10th February. Available at: http://ageconsearch.umn.edu/bitstream/ (Accessed: 11 September 2012).

Rotter, J.B. (1971) 'Generalized expectancies for interpersonal trust' *American psychologist,* 26 (5), pp. 443-452.

Rubio, D.M., Berg-Weger, M., Tebb, S.S., Lee, E.S. and Rauch, S. (2003) 'Objective content validity: conducting a content validity study in social work research' *Social Work Research,* 27 (2), pp. 94-104.

Rousseau, D., Bust, R. and Camerer, C. (1998) 'Introduction to special topic forum not so different after all: a cross discipline view of trust', *Academy of Management Review,* 23 (3), pp. 393-404.

Rust, R.T. and Oliver, R.L. (2000) 'Should we delight the customer?', *Journal of the Academy of Marketing Science,* 28, pp. 86-94.

Santos, J. and Boote, J. (2000) 'A theoretical exploration and model of consumer expectations, post-purchase affective states and affective behaviour', *Journal of Consumer Behaviour,* 3 (2), pp. 142-156.

Sarangapani, A. and Mamatha, T. (2008) 'Rural consumer: post-purchase behaviour and consumerism' *The Icfaian Journal of Management Research*, 7 (9), pp. 37-67.

Saunders, M., Lewis, P. and Thornhill, A. (2009) *Research methods for business students*. 5th edn. Essex: Pearson Education Limited.

Schembri, S., Merriless, B. and Kristiansen, S. (2010) 'Brand consumption and narrative of the self', *Psychology and Marketing*, 27 (6), pp. 623-638.

Schiffman, L.G. and Kanuk, L.L. (2004) *Consumer behavior*. 8th edn. Upper Saddle River, N.J.: Prentice Hall.

Schiffman, L.G., Kanuk, L.L and Wisenblit, J. (2010) *Consumer behavior.* 10thedn. New Jercy: Pearson Education, Inc.

Schiffman, L.G., Leslie, L.K. and Hansen, H. (2008) *Consumer behavior: a European outlook.* 6th edn. New Jersey: Pearson Education.

Schmitt, B.H. (1999) *Experiential Marketing*: *how to get customers to sense, feel, think, act, and relate to your company and brands.* New York: The Free Press.

Schmitt, B. (2009) 'The concept of brand experience', *Brand Management*, 16, pp. 417-419.

Schumacker, R. E. and Lumax, R. G. (2004) *A beginner's guide to structural equation modeling*. 2nd edn. London: Lawrence Erlbaum Associates, Publishers.

Schutte, H. and Ciarlante, D. (1998) *Consumer behavior in Asia*. London: Mcmillan Press Ltd.

Seiders, K., Voss G.B., Grewal. D. and Godfrey, A.L. (2005) 'Do satisfied customer buy more? Examining moderating influences in a retail context', *Journal of Marketing*, 69, pp. 26-42.

Selnes, F. (1998) 'Antecedents and consequences of trust and satisfaction in buyer-seller relationships', *European Journal of Marketing*, 32 (3/4), pp. 305-322.

Shane-McWhorter , L. (2009) *Type of dietary supplements*. Available at: http://www.diabetes.org/living-with-diabetes/treatment-and-care/medication/herbs-supplements-and-alternative-medicines/types-of-dietary-supplements.html. (Accessed: 4 November 2012).

Sheth, J.N., Mittal, B. and Newman, B.I. (1999) *Customer behavior: consumer behavior and beyond*. Orlando: The Dryden Press.

Siamturakij (2011) ‘Direct sale business’, 12-15 March 2011 [Online]. Available at: http://www.siamturakij.com/home/news (Accessed: 10 September 2011).

Siegrist, M., Earle, T. and Gutscher, H. (2003) ‘Test of a trust and confidence model in the applied context of electromagnetic field (EMF) risks’, *Risk Analysis*, 23, 705-716.

Singh, J. and Sirdeshmukh, D. (2000) ‘Agency and trust mechanisms in consumer satisfaction and loyalty judgments’, *Journal of the Academy of Marketing Science*, 28 (1), pp. 150-167.

Sirdesmukh, D., Singh, J. and Sabol, B. (2002) ‘Consumer trust, value, and loyalty in relational exchanges’, *Journal of Marketing*, 66, pp. 15-37.

Slassi, K. (2005) ‘The sensory experience’ *Brand Strategy*, pp. 40-41.

Smith, M.J. (1998) *Social science; in question.* London: SAGE Publications

Smith, R. and Royne, M.B. (2010) ‘Consumer literacy for credence services: helping the invisible hand’, *The Journal of Consumer Affairs*, 44 (3) , pp. 598-606..

Soderlund, M. (2002) ‘Customer familiarity and its effects on satisfaction and behavioural intentions’, *Psychology and Marketing*, 19 (19) , pp. 861-871.

Solomon, R.M. (2004) *Consumer behavior: buying, having, and being.* 6th edn. New Jercy: Pearson Education, Upper Saddle River.

Solomon, R.M., Bamossy, G. and Askegaard, S. (2002) *Consumer behavior: A European perspective.* 2nd edn. Essex : Pearson Education Limited.

Spreng, R., MacKenzie, S. and Olshavsky, R. (1996) 'A re-examination of the determinants of consumer satisfaction ', *Journal of Marketing*, 60, pp. 15-32.

Srinivasan, S.S. and Till, B.D. (2002) 'Evolution of search, experience and credence attributes: role of brand name and product trial', *Journal of Product and Brand Management*, 11 (7), pp. 417-431.

Steiner, B.E. and Yang, J. (2010) 'How do U.S. and Canadian consumers value credence attributes associated with beef labels after the North American BSE crisis of 2003?', *International Journal of Consumer Studies*, 34, pp. 449-463.

Stewart, D.W. and Shamdasani, P. N. (1990) *Focus group: theory and practice.* Newbury Park, CA: Sage Publications, Inc.

Szmigin, I. (2003) *Understanding the consumer.* London: SAGE Publications Ltd.

Tabachnick, B.G. and Fidell, L.S. (2007) *Using multivariate statistics* 5th edn. Boston: Pearson Education, Inc.

Tam, J.L.M. (2007) 'Managing customer expectations in financial services: opportunities and challenges', *Journal of Financial Service Marketing*, 11 (4), pp. 281-289.

Tear, R.K. (1993) 'Expectations, performance, evaluation, and consumers perceptions of quality', *Journal of Marketing*, 57 (4), pp. 18-34.

Thailand: a vibrant market (2005). *Brand strategy*, 194, pp. 44-46.

Thailand. National Statistical Office (2009) *Executive summary of the survey on health behaviour from food consumption in 2009* [Online]. Available at: http://www.service.nso.go.th/nso/nsopublish/service/servey/healthCare_52.pdf (Accessed: 25 February 2011).

Thailand. National Statistical Office (2011) *Statistical Forecasting Bureau* [Online]. Available at: http://www.service.nso.go.th/nso/nsopublish/BaseStat//basestat.html (Accessed: 25 February 2011).

Thailand. The Thai Food and Drug Administration of the Ministry of Public Health (2010) *Food Act B.E.2522 including Ministerial Regulation and the Notification of Ministry of Public Health of Thailand (revised version as of B.E.2553)* [Online] Available at: http://www.fda.moph.go.th/food/file/Laws/Common_Laws(Update2553).pdf (Accessed: 22 July 2012).

Thaipost (2012) 'A dramatic increase of Thai consumers expenditure on health goods', 23 January 2012 [Online]. Available at http://www.thaipost.net/node/51440 (Accessed: 10 September 2012).

Thansetakit (2011) 'The older target competition', 2,610, 17-19 February 2011 [Online]. Available at: http://www.thanonline.com/index.php?option=com_content&view=article&id=56131%3A2011-02-15-03-25-13&Itemid=1 (Accessed:12 April 2012).

The Association of Southeast Asian Nations (2006) *Profile of Definition, Terminology, and Technical Requirement of Traditional Medicines and Health Supplements among ASEAN Member Countries.* Available at: http://www.aseansec.org/20258.pdf (Accessed: 12 October 2012).

The trends of health concern, (2009) Available at: http://www.nanosearch.co.th/nano2/show_news_m.php?ID=140 (Accessed: 5 December 2010).

The trends of online media, (2009) Available at: http://www.thai2network.com/content-blog/20 (Accessed: 5 December 2010).

The World Cancer Research Fund (2010) *A closer look at: dietary supplements* Available at: http://www.wcrf-k.org/PDFs/DietarySupplementsLeaflet.pdf. (Accessed: 28 October 2012).

Thompson, B. (2003) *Score reliability: contemporary thinking on reliability issues*. Thousand Oaks, CA: Sage.

Tuu, H.H. and Olsen, S.O. (2009) 'Food risk and knowledge in the satisfaction-repurchase loyalty relationship', *Asia Pacific Journal of Marketing and Logistics*, 21 (4), pp. 521-536.

Umberger, W.J. and Boxall, P.C. and Lacy, C. (2009) 'Role of credence and health information in determining US consumers' willingness-to-pay for grass-finished beef', *The Australian Journal of Agricultural and Resource Economics*, 53, pp. 603-623.

Urban, G.L., Sultan, F. and Quails, W. J. (2000) 'Placing trust at the center of your internet strategy', *Sloan Management Review*, 41, pp. 39-48.

U.S. Food and Drug Administration (2012) *Dietary Supplement*. Available at: http://www.fda.gov/food/dietarysupplements/default.htm (Accessed: 12 October 2012).

Vanniarajan, T. and Alleswari, A. (2010) 'Busqual and repurchase intention among the passengers: an empirical study', *Journal of Marketing and Communication*, 6 (1), pp. 10-17.

Vaus, D. (2002) *Analyzing social science data.* Reprint, London: SAGE Publications Ltd., 2004.

Vazquez-Casielle, R., Suarez-Alvarez, L. and Rio-Lanza, B.D. (2009) 'Customer satisfaction and switching barriers: effects on repurchase intentions, positive recommendations, and price tolerance', *Journal of Applied Social Psychology*, 39 (10), pp. 2275-2302.

Verdes, R.P. (2009) 'Consumer confidence boosts supplement industry' *Drug Store News*. 16 November, 31 (14), p. 27.

Voss, G.B., Gogfrey, A. and Seiders, K. (2010) 'How complementarity and substitution alter the customer satisfaction repurchase link', *Journal of Marketing*, 74, pp. 111-127.

Walker, J. and Baker, J. (2000) 'An exploratory study of a multi-expectation framework for services', *The Journal of Services Marketing*, 14 (5) , pp. 411-431.

Wampold, B.E. and Freund, R.D. (1987) 'Use of multiple regression in counselling psychology research: a flexible data-analytic strategy' *Journal of Counselling Psychology*, 34, pp. 372-382.

Wan, Y. and Nakayama, M. and Sutcliffe, N. (2012) 'The impact of age and shopping experiences on the classification of search, experience, and credence goods in online shopping', *Information Systems and eBusiness Management*, pp. 1-18.

Weber, R. (2004) 'The rhetoric of positivism versus interpretivism', *MIS Quarterly*, 28 (1), pp. 3-7.

Weinberg, B.D. (2001) 'Research in exploring the online consumer experience', *Advances in Consumer Research*, 28 (1), pp. 227-232.

Weiss, M.D. (1995) 'Informational issues for principals and agents in the market for food safety and nutrition', in Caswell, J.A. (ed.) *Valuing Food Safety and Nutrition.* Colorado: Westview Press, Boulder, pp. 69-79.

Wen , C., Prybutok,V.R., and Xu, C. (2011) 'An integrated model for customer online repurchase intention', *Journal of Computer Information Systems*, pp.14-23.

Westbrook, R.A. and Oliver, R.L. (1991) 'The dimensionality of consumption emotion patterns and consumer satisfaction', *Journal of Consumer Research*, 18, pp. 84-91.

Westbrook, R.A. and Reilly, M.D. (1983) 'Value-percept disparity: an alternative to the disconfirmation of expectations theory of consumer satisfaction', *Advances in Consumer Research*, 10 (1), pp. 256-261.

White, C. and Yu, Y.T. (2005) 'Satisfaction emotions and consumer behavioural Intentions', *Journal of Services Marketing*, 19 (6), pp. 411-420.

Wilkie, L.W. (1994) *Consumer behaviour*. 3rd edn. New York: John Wiley and Son.

Wirth, F.F., Stanton, J.L. and Wiley, J.B. (2011) 'The relative importance of search versus credence product attributes: organic and locally grown', *Agricultural and Resource Economics Review*, 40 (1), pp. 48-62.

Wright, R. (2006) *Consumer behaviour*. London: Thomson Learning.

Xinping, Z. (2002) 'Interpretivist research, positivist research, and field research', *Chinese Education and Society*, 35 (2), pp. 39-46.

Yavas, U., Babakus, E. and Eroglu, S. (2004) 'Bank choice behaviour of small and medium-sized construction firms', *Journal of Business and Industrial Marketing*, 19 (4), pp. 258-266.

Yen, C. and Lu, H. (2008) 'Factors influencing online auction repurchase Intention', *Internet Research*, 18 (1), pp. 7-25.

Yi, Y. (1990) 'A critical review of consumer satisfaction', *Review of Marketing*, pp. 68-123.

Yi, Y. and Gong, T. (2009) ‘An investigate model of customer social exchange relationship: the moderating role of customer experience’, *Service Industries Journal*, 29 (11), pp. 1513-1528.

Yi, Y. and La, S. (2004) ‘What influences the relationship between customer satisfaction and repurchase intention? Investigating the effects of adjusted expectations and customer loyalty’, *Journal of Psychology and Marketing*, 21 (5), pp. 351-373.

Yuksel, A. (2003) ‘Market segmentation based on customers post-purchase performance evaluation: a case of tourist dinners’, *Journal of Travel and Tourism Marketing*, 15 (1), pp. 1-18.

Zajonc, R. (1980) ‘Feeling and thinking: preferences need no inferences’, *American Psychologist*, 35, pp. 151–175.

Zarantonello, L. and Schmitt, B.H. (2010) ‘Using the brand experience scale to profile consumers and predict consumer behaviour’, *Brand Management*, 17 (7), pp. 532-540.

Zarantonello, L., Schmitt, B.H. and Brakus, B.H. (2007) ‘Development of brand experience scale’, *Advances in Consumer Research*, 34, pp. 580-582.

Zeithaml, V. A. (1988) ‘Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, *52*, pp. 2-22.

Zeithaml, V., Berry, L. and Parasuraman, A. (1993) ‘The nature and determinants of customer expectations of service’, *Journal of the Academy of Marketing Science*, 21, pp. 1-12.

Zeithaml, V.A., Berry, L.L. and Parasuraman, A. (1996) ‘The behavioral consequences of service quality’, *Journal of Marketing*, 60, pp. 31-46.

Zelena, M. (1981) *Multiply criteria decision making* [Online]. Available at http://classwebs.spea.indiana.edu/kenricha/Oxford/Courses%202010/Decision%20Making%202010/Articles/Zeleny,%20Ch.%203.pdf (Accessed: 13 October 2010).

Zhou, T., Lu, Y. and Wang, B. (2009) ‘The relative importance of website design quality and service quality in determining consumers’ online repurchase behaviour’ *Journal of Information Systems Management* , 26 (4), pp. 327-337.

Appendices

Appendix A

Focus group and Pilot study

Appendix A-1 Moderator's interview guide questions (English version)

Q 1. What does a dietary supplement mean to you?

Q 2. Why do you consume dietary supplements?

Q 3. Who recommended you taking dietary supplements?

Q 4. How do you select appropriate dietary supplements for your health?

Q 5. Where did you look for information about dietary supplements?

Q 6. What brand have you consumed and why do you purchase it?

Q 7. Where do you purchase dietary supplements (in store or online)

Q 8. What did you expect from taking the dietary supplements?

Q 9. What do you pay attention to after taking the supplements/ do the products meet your expectation?

Q 10. How do you know that the product worked?

Q 11. What are you satisfied with regarding the product you have purchased/consumed?

Q 12. Why would you purchase the same brand/product again? / Why would you not purchase it again?

Appendix A-2 **Consent form and screening questionnaire (English version)**

Appendix A-2.1 **Important information before participating in Focus group (English version)**

Title of research **Examining factors influencing the repurchasing intention of credence products: Empirical evidence from Thailand**

Researcher Miss Sophapan Sunyansanoa
A postgraduate research student at Business and Management Research Institute, University of Bedfordshire, United Kingdom

I am a postgraduate research student at the Business and Management Research Institute, University of Bedfordshire, United Kingdom. This study aims to explore the post-purchase evaluation factors for repurchase intentions of credence products. I would like to invite you to participate in a focus group discussion. The purpose of the group is mainly to obtain opinions of the participants. The session will take approximately time from 1.5 to 2.0 hours and light refreshments will be served. All of your responses will be kept confidential.

Before you decide to participate, you need to understand why this study is being done and how it would invite you. Please take your time to read and consider the following information carefully. If there is anything you do not understand or you

would like to have more information, please ask me (the researcher). Please take your time to decide whether you desire to participate in the group.

1. The purpose of the study

This study aims to explore the post-purchase evaluation factors for repurchase intentions of credence products, with respect to dietary supplements in Thailand. The results of this study would be expected to increase the understanding of post-purchase evaluation for repurchase intentions of credence products in Thailand. A particularly important contribution to knowledge of this study focuses conceptual model of post-purchase evaluation for repurchase intentions of credence products. This will be beneficial for both public and private sectors in Thailand, which are relevant to credence products industries.

2. The decision for participation

You are invited to participate in this study because you are a dietary supplements user, who is the target respondent of the study. It depends on you to decide if you desire to participate. If you agree to participate in this study, you are free to cancel from the study at any point without giving a reason.

3. Possible benefits of participation

The researcher cannot promise you any direct benefit from participation in this study. The information gained from the participants can provide a deeper understanding of your post-purchase evaluation for repurchase in the consumption of credence products. This will serve as a resource for the future research on other aspects on post-purchase evaluation behaviour in consuming other credence products both in Thailand and aboard.

4. Possible disadvantages and risks of participation

There will not be any obvious risk to you in participation this study. However, you may have some uneasiness when you are asked to recall your experience with the products. If any sensitive question is brought up, you can cancel from the study at any point without giving any reason. If you decide to cancel the study, the researcher will demolish all of your personal information and all responses you have taken part before.

5. The participation in the study will be kept confidential

All the personal information collected will be kept in a secured place to protect the confidence of participants. Information such as your name will be marked and coded. Only the code will be used as an identifier in the thesis or any related publications. Therefore, your anonymity is maintained throughout the work.

Research supervisors and colleagues will not be told of your information in this study.

Contact details

If you have concerns about any aspect of this study, you should ask the researcher to answer your questions. Please contact:

Miss Sophapan Sunyansanoa

Mobile phone in Thailand: 0066-(0)8 2325 6329

E-mail address: sophapan.sunyansanoa@beds.ac.uk

Appendix A-2.2 **Consent form (English version)**

Title of research **Examining factors influencing the repurchasing intention of credence products: Empirical evidence from Thailand**

Researcher Miss Sophapan Sunyansanoa
A postgraduate research student at Business and Management Research Institute, University of Bedfordshire, United Kingdom

Please initial box

1. I confirm that I have read and understand the information sheet, and have received the information from Miss Sophapan Sunyansanoa (researcher) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.	
2. I understand that my participation is voluntary and I am free to withdraw at any time without giving any reason.	
3. I understand that my name will be coded by a number; therefore, my name will not appear anywhere.	
4. I have read and understood the above information and agree to sign this consent form voluntarily.	

Name of participant	Date	Signature
Name of researcher	Date	Signature

When completed, 1 copy for participant, 1 copy for researcher.

Appendix A-2.3 Screening questionnaire (English version)

Part 1 Interviewer's part

Date…….....

Interviewer's name…….....

Part 2 Participant's part

S2.1. Have you **ever bought and consumed** any dietary supplements for the past 12 months?

- ❒ Yes (Continue to S.2)
- ❒ No (Thank and Terminate)

S2.2. Have you been a patient or under an illness treatment?

- ❒ Yes (Thank and Terminate)
- ❒ No (Continue to S.3)

S2.3. Gender

- ❒ Male (Check quota)
- ❒ Female (Check quota)

S2.4. Age as of 31st December 2011

- ❒ Below 18 years old (Close)
- ❒ 18 - 30 years old (Check quota)
- ❒ 31 - 40 years old (Check quota)
- ❒ 41 - 50 years old (Check quota)
- ❒ > 50 years old (Check quota)

S2.5. Highest level of education

- ❒ College/technical school/vocational school or equivalent
- ❒ Bachelor's degree
- ❒ Master's degree
- ❒ Doctoral degree

S2.6. Present occupation

- ❒ Student
- ❒ Company employee
- ❒ Government employee
- ❒ Housewife
- ❒ Self-employed/Business owner
- ❒ Unemployed (Close)
- ❒ Other.....*(please specify*)

S2.7. Family income per month

- ❒ Less than 15,000 Baht
- ❒ 15,001-30,000 Baht
- ❒ 30,001-45,000 Baht
- ❒ 45,001-60,000 Baht
- ❒ 60,001-75,000 Baht
- ❒ 75,001-90,000 Baht
- ❒ More than 90,001 Baht

S2.8. What **kind of dietary supplements** have you consumed or bought during the past 12 months? (Please tick as many as applicable.)

- ❒ Vitamins
- ❒ Minerals
- ❒ Herbs or other botanicals

S2.9. Where did you **buy dietary supplements**?
(Please tick as many as applicable.)

- ❒ Drugstore
- ❒ Drug section within department store, supermarket, or super store
- ❒ Convenience store (e.g. 7-11, Family Mart)
- ❒ Direct sale (e.g. Amway, Herbalife)
- ❒ Online
- ❒ Other.....*(please specify)*

S2.10. Have you participated in any focus group in the past 6 months?

- ❒ Yes (Thank and terminate)
- ❒ No (Continue to part 3)
- ❒ Don't know/refused (Thank and terminate)

Part 3 Group attendance

S3.1. Would you be interested in attending such a group?

- ❒ Yes (Continue to S.13)
- ❒ No (Thank and Terminate)

S3.2 Group attendance

- ❒ Group 1. At 2 pm. Date **23rd August 2011**
- ❒ Group 2. At 2 pm. Date **28th August 2011**

S3.3 I wish to have your full name and mailing address so that we can send you a confirmation letter and directions (for further information).

Name……

Address……

E-mail……..

Telephone……

Thank you very much for your time.

Appendix A-3 Moderator's interview guide questions (Thai version)

Q1. ผลิตภัณฑ์เสริมอาหาร หมายถึงอะไร

(Moderator ให้กลุ่มตัวอย่างเขียนความหมายตามที่เข้าใจลงในกระดาษที่จัดเตรียมไว้)

Q2. เหตุผลที่คุณเลือกรับประทานผลิตภัณฑ์เสริมอาหาร

(Moderator ให้กลุ่มตัวอย่างเขียนเหตุผลตามที่เข้าใจลงในกระดาษที่จัดเตรียมไว้ กลุ่มตัวอย่างสามารถระบุได้มากกว่า 1 เหตุผล)

Q3. ใครเป็นผู้แนะนำให้คุณเลือกบริโภคผลิตภัณฑ์เสริมอาหาร (เช่น เพื่อน, หมอ หรือตัวเอง)

Q4. คุณมีวิธีเลือกผลิตภัณฑ์เสริมอาหารที่เหมาะกับตัวคุณ/สุขภาพคุณอย่างไร

Q5. คุณหาข้อมูลเกี่ยวกับผลิตภัณฑ์เสริมอาหารจากที่ใด (Internet, โบรชัวร์ ฯลฯ)

Q6. คุณซื้อหรือบริโภคผลิตภัณฑ์เสริมอาหารยี่ห้อใด

Q7. ผลิตภัณฑ์เสริมอาหารที่คุณบริโภคอยู่ในปัจจุบัน คุณซื้อจากที่ใด (ร้านค้า เช่น 7-11, ร้านขายยา)

Q8. คุณคาดหวังอะไรบ้างจากการบริโภคผลิตภัณฑ์เสริมอาหาร

Q9. ผลิตภัณฑ์เสริมอาหารที่คุณบริโภค สามารถตอบสนองต่อความคาดหวังได้หรือไม่อย่างไร

Q10. คุณทราบได้อย่างไรว่าผลิตภัณฑ์เสริมอาหารที่คุณบริโภค มีประสิทธิภาพ/ประสิทธิผล

Q11. คุณมีความพึงพอใจ/ไม่พึงพอใจ ต่อผลิตภัณฑ์เสริมอาหารที่คุณบริโภคอยู่ด้านใดบ้าง

Q12. คุณซื้อผลิตภัณฑ์เดิมหรือยี่ห้อเดิมในครั้งต่อไปหรือไม่ กรุณาระบุเหตุผล

หากไม่ซื้อผลิตภัณฑ์เดิมหรือยี่ห้อเดิมกรุณาระบุเหตุผล

Appendix A-4 Consent form and screening questionnaire for focus group participation (Thai version)

Appendix A-4.1 Important information before participating in Focus group (Thai version)

หัวข้องานวิจัย การศึกษาปัจจัยที่มีผลต่อความตั้งใจซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือ: กรณีศึกษาหลักฐานเชิงประจักษ์ในประเทศไทย

ผู้วิจัย นางสาวโสภาพรรณ สัญญาณเสนาะ
นักศึกษาวิจัยระดับบัณฑิตศึกษา, Business and Management Research Institute, University of Bedfordshire, United Kingdom

เรียนกลุ่มตัวอย่าง

ดิฉันเป็นนักศึกษาวิจัยระดับบัณฑิตศึกษาที่ สถาบันวิจัยธุรกิจและการจัดการ (Business and Management Research Institute), มหาวิทยาลัยเบดฟอร์ดเชียร์ (University of Bedfordshire) สหราชอาณาจักร ขณะนี้กำลังเก็บ ข้อมูลเพื่องานวิจัยในหัวข้อ “การศึกษาปัจจัยที่มีผลต่อความตั้งใจซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือ: กรณีศึกษาหลักฐานเชิงประจักษ์ในประเทศไทย” ต้องการขอความร่วมมือและความคิดเห็นจากท่านในการร่วมสนทนากลุ่ม (Focus Group) ซึ่งจะใช้เวลาประมาณ 1.30-2 ชั่วโมง รวมช่วงเวลาพัก และข้อมูลที่ได้จากการสัมภาษณ์ครั้งนี้จะเก็บเป็นความลับทั้งหมด

ก่อนการตัดสินใจเข้าร่วมสนทนากลุ่มขอให้ท่านทำความเข้าใจในข้อมูลต่อไปนี้ โปรดอ่านอย่างละเอียด หากมีข้อสงสัยหรือไม่เข้าใจกรุณาถามผู้วิจัย และโปรดใช้เวลาในการคิดและตัดสินใจ

1. วัตถุประสงค์ในการศึกษาครั้งนี้

วัตถุประสงค์ของการวิจัยครั้งนี้เพื่อการศึกษาปัจจัยที่มีผลต่อการซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือในประเทศไทย ผลการศึกษาที่คาดว่าจะได้รับคือเพื่อเพิ่มความเข้าใจรูปแบบพฤติกรรมผู้บริโภคการประเมินหลังการซื้อผลิตภัณฑ์ที่มีความน่าเชื่อถือในประเทศไทย ซึ่งผลที่ได้จะเป็นประโยชน์ต่อหน่วยงานภาครัฐ ในการวิจัยและพัฒนาผลิตภัณฑ์ให้สามารถตอบสนองต่อความต้องการของผู้บริโภคได้ต่อไป

2. การตัดสินใจเข้าร่วม

คุณได้รับเชิญในการเข้าร่วมสนทนากลุ่มเพราะคุณเป็นผู้บริโภคผลิตภัณฑ์เสริมอาหารซึ่งเป็นกลุ่มตัวอย่างในการศึกษาครั้งนี้ การเข้าร่วมหรือไม่เข้าร่วมขึ้นอยู่กับการตัดสินใจของคุณ แม้ว่าคุณตัดสินใจเข้าร่วมแล้ว คุณสามารถที่จะขอยกเลิกได้โดยไม่ต้องระบุเหตุผลในภายหลังได้

3. ประโยชน์โดยตรงจากการเข้าร่วม

ผู้วิจัยไม่ขอสัญญาเรื่องประโยชน์โดยตรงที่ผู้เข้าร่วมจะได้จากการเข้าร่วมครั้งนี้ ซึ่งข้อมูลที่ได้จะไปสนับสนุนด้านการผลการศึกษา คือ รูปแบบพฤติกรรมผู้บริโภคต่อปัจจัยการซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือในประเทศไทย และจะเป็นแหล่งข้อมูลให้กับการศึกษาวิจัยในหัวข้อที่เกี่ยวข้องในอนาคตต่อไป

4. สิ่งที่ไม่ได้ประโยชน์และอัตราเสี่ยงในการเข้าร่วม

ไม่มีอัตราเสี่ยงใดๆ ในการเข้าร่วมครั้งนี้ อย่างไรก็ตาม คุณอาจจะมีความวิตกกังวลกับคำถามที่ผู้วิจัยถามเกี่ยวกับประสบการณ์ของคุณที่ผ่านมา ถ้าหากคุณไม่สะดวกจะให้คำตอบคุณสามารถที่จะหยุดการสนทนาได้ทันทีโดยไม่จำเป็นต้องแจ้งเหตุผล และผู้วิจัยจะทำลายข้อมูลส่วนตัวและไม่นำมาใช้ในการวิจัยครั้งนี้

5. การเข้าร่วมครั้งนี้ ข้อมูลจะเก็บเป็นความลับ

ข้อมูลส่วนตัวทั้งหมดของผู้เข้าร่วมจะถูกเก็บเป็นความลับและรักษาไว้อย่างดี เช่น ชื่อ และการปิดบังเรื่องข้อมูลส่วนตัวจะใช้ตลอดการศึกษาครั้งนี้ โดยทางผู้วิจัยจะแปลผลข้อมูลเป็นเพียงรหัส ซึ่งการเผยแพร่ข้อมูลในวิทยานิพนธ์ไม่ปรากฏชื่อและข้อมูลส่วนตัวของผู้เข้าร่วม นอกจากนี้อาจารย์ที่ปรึกษาตลอดจนทีมงาน จะไม่ทำการเผยแพร่ข้อมูลนี้เช่นกัน

หากมีข้อสงสัยหรือไม่เข้าใจกรุณาติดต่อสอบถามผู้วิจัย ดังนี้

นางสาวโสภาพรรณ สัญญาณเสนาะ

เบอร์โทรศัพท์: 0066-(0)8 2325 6329

อีเมล์: sophapan.sunyansanoa@beds.ac.uk

Appendix A-4.2 Consent form (Thai version)

หัวข้องานวิจัย การศึกษาปัจจัยที่มีผลต่อความตั้งใจซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือ: กรณีศึกษาหลักฐานเชิงประจักษ์ในประเทศไทย

ผู้วิจัย นางสาวโสภาพรรณ สัญญาณเสนาะ
นักศึกษาวิจัยระดับบัณฑิตศึกษา, Business and Management Research Institute, University of Bedfordshire, United Kingdom

โปรดทำเครื่องหมาย ✓ ลงในช่อง ☐ หน้าข้อความต่อไปนี้

☐ ข้าพเจ้ายืนยันว่าได้อ่านและทำความเข้าใจข้อมูลสำคัญดังกล่าวเป็นที่เรียบร้อยแล้ว และได้รับข้อมูลจากการศึกษาครั้งนี้จากนางสาวโสภาพรรณ สัญญาณเสนาะ และได้รับโอกาสในการพิจารณา ถามคำถามและคำตอบเป็นที่พอใจแล้ว

☐ ข้าพเจ้าเข้าใจว่าการเข้าร่วมเป็นไปด้วยความสมัครใจและสามารถที่จะหยุดการสนทนาได้ทันทีโดยไม่จำเป็นต้องแจ้งเหตุผล

☐ ข้าพเจ้าเข้าใจว่าชื่อของข้าพเจ้าจะถูกแปลเป็นรหัสและไม่ปรากฏในที่สาธารณะ

☐ ข้าพเจ้าได้อ่านและเข้าใจข้อมูลดังกล่าวทั้งหมดข้างต้นและยินยอมที่จะเซ็นชื่อในหนังสือแสดงความยินยอมเข้าร่วมด้วยความสมัครใจ

ผู้เข้าร่วม	วันที่	ลายเซ็นต์
ผู้วิจัย	วันที่	ลายเซ็นต์

เมื่อเสร็จสมบูรณ์, สำเนาเอกสาร 1 ชุดสำหรับผู้เข้าร่วม, สำเนาเอกสาร 1 ชุด สำหรับผู้วิจัย.

Appendix A- 4.3 Screening questionnaire (Thai version)

ส่วนที่ 1 สำหรับเจ้าหน้าที่

วันที่.....

ชื่อ-นามสกุลผู้สัมภาษณ์.....

ส่วนที่ 2 สำหรับผู้ถูกสัมภาษณ์

กรุณาตอบคำถามดังต่อไปนี้

S2.1. ในช่วง 12 เดือนที่ผ่านมาคุณเคยซื้อและรับประทานผลิตภัณฑ์เสริมอาหารหรือไม่

❒ เคย (ถามต่อ S2.)

❒ ไม่เคย (ปิดสัมภาษณ์)

S2.2. ปัจจุบันคุณกำลังอยู่ในระหว่างการรักษาโรคหรือไม่

❒ ไม่ใช่ (ถามต่อ S3.)

❒ ใช่ (ปิดสัมภาษณ์)

S2.3. เพศ

❒ ชาย (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

❒ หญิง (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

S2.4. อายุปัจจุบัน (จนถึงวันที่ 31 ธันวาคม 2554)

❒ ต่ำกว่า 18 ปี (ปิดสัมภาษณ์)

❒ 18 - 30 ปี (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

❒ 31 - 40 ปี (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

❒ 41 - 50 ปี (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

❒ > 50 ปี (ตรวจสอบจำนวนกลุ่มตัวอย่าง)

S2.5. การศึกษาสูงสุด

- ❒ ม.6. /ปวช/ปวส.
- ❒ ปริญญาตรี
- ❒ ปริญญาโท
- ❒ ปริญญาเอก

S2.6. อาชีพปัจจุบัน

- ❒ นักเรียน
- ❒ พนักงานบริษัท
- ❒ ข้าราชการ
- ❒ แม่บ้าน
- ❒ ธุรกิจส่วนตัว
- ❒ ว่างงาน (ปิดสัมภาษณ์)
- ❒ อื่นๆ ระบุ.....

S2.7. รายได้ครอบครัวต่อเดือน

- ❒ น้อยกว่า 15,000 บาท
- ❒ 15,001-30,000 บาท
- ❒ 30,001-45,000 บาท
- ❒ 45,001-60,000 บาท
- ❒ 60,001-75,000 บาท
- ❒ 75,001-90,000 บาท
- ❒ More than 90,001 บาท

S2.8. ประเภทของผลิตภัณฑ์เสริมอาหารที่รับประทาน? (ตอบได้มากกว่า 1 คำตอบ.)

- ❒ วิตามิน
- ❒ แร่ธาตุ
- ❒ สมุนไพรหรือผลิตภัณฑ์ที่สกัดจากธรรมชาติ

S2.9. คุณซื้อผลิตภัณฑ์เสริมอาหารที่ใด? (ตอบได้มากกว่า 1 คำตอบ.)

- ❒ ร้านขายยา
- ❒ แผนกขายยาในห้างสรรพสินค้า
- ❒ ร้านสะดวกซื้อ (e.g. 7-11, แฟมิลี่มาร์ท)
- ❒ พนักงานขายตรง (e.g. แอมเวย์, เฮอร์เบอไลฟ์)
- ❒ อินเทอร์เน็ต
- ❒ อื่นๆ ระบุ.....

S10. ในช่วง 6 เดือนที่ผ่านมาคุณเคยเข้าร่วมสัมภาษณ์กลุ่มหรือไม่?

- ❒ เคย (กล่าวขอบคุณและปิดสัมภาษณ์)
- ❒ ไม่เคย (ถามต่อข้อ ส่วนที่ 3)
- ❒ ไม่แน่ใจหรือปฏิเสธการเข้าร่วมสัมภาษณ์กลุ่ม (กล่าวขอบคุณและปิดสัมภาษณ์)

ส่วนที่ 3 การเลือกกลุ่มสัมภาษณ์

S3.1 คุณตกลงเข้าร่วมกลุ่มสัมภาษณ์หรือไม่?

- ❒ ตกลง (ถามต่อข้อ S3.2)
- ❒ ไม่ตกลง (กล่าวขอบคุณและปิดสัมภาษณ์)

S3.2 กรุณาระบุวันเวลาที่สามารถเข้าร่วมสัมภาษณ์กลุ่ม

- ☐ กลุ่มที่ 1. เวลา 14.00 วันที่ 23 สิงหาคม 2554
- ☐ กลุ่มที่ 2. เวลา 14.00 วันที่ 28 สิงหาคม 2554

S3.3 กรุณากรอกข้อมูลต่อไปนี้ เพื่อให้ผู้วิจัยติดต่อกลับเพื่อส่งจดหมายยืนยันการเข้าร่วมกลุ่มสัมภาษณ์

ชื่อ-นามสกุล.....

ที่อยู่.....

อีเมล์.....

เบอร์โทรศัพท์.....

ขอขอบคุณในความร่วมมือ

Appendix A-4.4 The results of focus group

Appendix A-4.4.1 Definitions of dietary supplements

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Definitions of dietary supplements **The product can replace some nutrients that they may not receive from the normal food intake.**			✓✓	✓✓	✓	✓	✓	✓	8
The products can revitalize the body and its immune system.	✓	✓						✓	3
The products are extracted from plants, vegetables and fruits in tablet forms for easy consumption.						✓		✓	2
To keep healthy and bring in additional nutrients apart from the normal food intake.		✓✓					✓		3

Source: Researcher's fieldwork

Appendix A-4.4.2 Reasons for consuming dietary supplements

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥ 50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Reasons for consuming dietary supplements **To replace and fill any nutrient deficiency in the body.**	✓	✓	✓		✓	✓			5
To keep healthy and slow the ageing process of body parts e.g. eyes, facial skin.	✓	✓			✓	✓			4
Brands and prices.						✓	✓	✓	3
Promotional campaigns and advertisements.	✓				✓	✓			3
To add extra nutrients to the body.			✓				✓		2
To maintain longevity.				✓				✓	2
To keep healthy and enhance the immune system.						✓			1
To reduce and prevent any risk of illness/disease.				✓					1
The particular health benefits of the product.								✓	1
Medical advice.				✓					1

Source: Researcher's fieldwork

Appendix A-4.4.3 Who recommended you taking dietary supplements /Choosing an appropriate dietary supplements

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥ 50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Who recommended you taking dietary supplements?									
Friends	✓	✓	✓✓	✓		✓	✓	✓	8
Medical advice				✓				✓	3
Advertisement	✓				✓	✓			3
Family members	✓				✓				2
Choosing an appropriate dietary supplements									
Consider the health benefits of dietary supplement products in terms of improving nutrient deficiencies or the immune system.	✓	✓	✓	✓✓	✓	✓✓	✓	✓✓	11
Consider a trustworthy brand and price.		✓	✓				✓		3
Consider an appropriate time e.g. examination time or any time that requires brain function.	✓				✓				2

Source: Researcher's fieldwork

Appendix A-4.4.4 Source of dietary supplements before purchasing/Brands

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Source of dietary supplements before purchasing									
The internet	✓✓	✓✓	✓✓		✓✓	✓✓	✓✓		12
Friends				✓				✓	2
Doctors				✓					1
Salesperson								✓	1
Brands									
Brand	✓	✓	✓		✓	✓			5
Blackmore	✓		✓	✓	✓				5
Amway				✓			✓	✓✓	4
Centrum		✓							1
Mega V care						✓			1

Source: Researcher's fieldwork

Appendix A-4.4.5 Place for purchasing dietary supplements/ Expectation after taking dietary supplements

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Place for purchasing dietary supplements									
Drug store	✓✓	✓	✓✓	✓	✓✓	✓			9
Direct salesperson				✓			✓✓	✓	4
The internet								✓	1
Boots shop		✓							1
Department store						✓			1
Expectation after taking dietary supplements									
To keep healthy	✓✓	✓	✓		✓✓	✓	✓	✓	9
Dietary supplement products must be safe, efficacy as advertised and worth the money		✓	✓			✓			3
Prevent fatal diseases such as cancer.				✓✓					2
Get better health and save money on medical costs.							✓	✓	2

Source: Researcher's fieldwork

Appendix A-4.4.6 How do you know that the product worked?

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
How do you know that the product worked? **They evaluate based on their health observation. A comparison between consuming and not consuming for a while.**		✓	✓	✓	✓	✓	✓	✓	7
They noticed that the difference as they felt they were healthier with dietary supplement products than when not consuming any.		✓		✓			✓	✓	4
They did further research on how to consume; for example, the best time/period to consume the products for the maximum results such as examination time or eventful days/weeks. If they consume the products within this time, they can keep fit and refreshed.	✓				✓	✓			3
Their body show signs of deficiency and examine the detailed ingredients and extracts so that their body deficiencies can be filled.	✓		✓						2

Source: Researcher's fieldwork

Appendix A-4.4.7 Reason for satisfaction with products

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Reason for satisfaction with products									
Products are useful for my health.		✓				✓	✓		3
Products can fill a known diet deficiency.			✓		✓		✓		3
Products have a reasonable price.			✓	✓✓					3
Trusting the brands or products.		✓						✓	2
Products can boost my immune system.	✓					✓	✓		3
Have previous good experience with products.		✓		✓	✓				3
Product has a good performance/quality.	✓							✓	2
Products are convenient to buy.			✓			✓			2

Source: Researcher's fieldwork

Appendix A-4.4.8 Repurchase intentions/Reason for repurchase intentions

Criteria of results	Group 1 and Group 2				Group 1 and Group 2				Total
	Male				Female				
	Younger participants		Older participants		Younger participants		Older participants		
	18-30 years old	31-40 years old	41-50 years old	≥50 years old	18-30 years old	31-40 years old	41-50 years old	≥50 years old	
	N=2	N=2	N=2	N=2	N=2	N=2	N=2	N=2	
Repurchase intentions **Repurchase the same brand and same product.**	✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	✓✓	15
Repurchase the same product but other brands.	✓								1
Reason for repurchase intentions Consuming the products for a while.	✓	✓	✓✓	✓	✓✓	✓	✓	✓	10
Familiar with the products.	✓						✓	✓	3
Trust the brands		✓		✓		✓			3

Source: Researcher's fieldwork

Appendix A-5 **Questionnaire for pilot study and official survey (English version)**

Appendix A-5.1 **Importance information before participation in the survey (English version)**

Title of research **Examining factors influencing the repurchasing intention of credence products: Empirical evidence from Thailand**

Researcher Miss Sophapan Sunyansanoa
A postgraduate research student at Business and Management Research Institute, University of Bedfordshire, United Kingdom

Dear Respondent,

I am a postgraduate research student at Business and Management Research Institute, University of Bedfordshire, United Kingdom. This questionnaire is conducted as part of my research project. The research is aimed to examining factors influencing the repurchasing intention of credence products with respect to dietary supplements in Thailand. In order to collect essential information for the research, I would like to invite you to take part in the questionnaire survey.

It is expected that this questionnaire will take no longer than 20 minutes to complete. Please fill all the questions. Your answers are vital for completing this research project. All personal information collected will be kept in a secured place to protect the confidence of the participants. Therefore, your anonymity is maintained throughout the work. Your time and cooperation in providing this crucial information is highly appreciated.

If you have any questions about this questionnaire, please feel free to contact me at the contact details below.

Yours sincerely,
Sophapan Sunyansanoa

Appendix A-5.2 Screening question and questionnaire (English version)

Appendix A-5.2.1 Screening questionnaire (English version)

Code.....

Are you a patient or under an illness treatment?

- ❒ Yes (*end of questionnaire, and thank you very much)*
- ❒ No (*go to next question*)

Have you consumed any dietary supplements during the past 12 months?

- ❒ Yes (*go to the next section)*
- ❒ No (*end of questionnaire, and thank you very much)*

Have you repurchase any dietary supplements during the past 12 months?

- ❒ Yes (*go to part 1-4)*
- ❒ No (*end of questionnaire, and thank you very much)*

Current location

- ❒ Central region, Bangkok or its Vicinity
- ❒ North region
- ❒ Northeast region
- ❒ South region

Appendix A-5.2.2 Questionnaire (English version)

Please complete each item by marking √ in ☐ or fill in the blanks.

<u>Part 1</u> Personal factors and self-concept

1. How often have you consume dietary supplements per day?
   ❒ Once ❒ Twice ❒ Three times ❒ Four times

2. Please specify the time you usually consume dietary supplements
   ❒ Before a meal
   ❒ After a meal
   ❒ Before going to bed
   ❒ Uncertain/cannot specify the time

3. How often have you consume dietary supplements per week?
   ❒ Every day
   ❒ 1 day/week
   ❒ 2 days/week
   ❒ 3 days/week
   ❒ 4 days/week
   ❒ 5 days/week
   ❒ 6 days/week

4. How often have you bought dietary supplements during the past 12 months?
   ❒ 1-2 times/year
   ❒ 3-4 times/year
   ❒ 5-6 times/year
   ❒ 7-8 times/year
   ❒ 9-10 times/year
   ❒ 11-12 times/year
   ❒ More than12 times/year

5. How much do you spend on dietary supplements on each occasion?
   ❒ Less than 500 baht
   ❒ 501-1,000 Baht
   ❒ 1,001-2,000 Baht
   ❒ 2,001-3,000 Baht
   ❒ 3,001-4,000 Baht
   ❒ 4,001-5,000 Baht
   ❒ More than 5,000 Baht

6. What kind of dietary supplements have you consumed during the past 12 months? (Please tick as many as applicable.)

❒ Vitamins ❒ Minerals ❒ Herbs or other Botanicals

7. What is the brand that you **consume/use the most**?

❒ Blackmores ❒ Amway

❒ Brand ❒ Other.....*(please specify)*

8. How important were the following in the choices of dietary supplements, please tick the number that most closely reflects your views.

Seven point Likert scales are employed

Not at all important: __1__:__2__:__3__:__4__:__5__ : __6__:__7__Extremely important

Items		Agreement						
		Not at all important						Extremely important
1	To replace any nutrient deficiency.	1	2	3	4	5	6	7
2	To enhance the immune system.	1	2	3	4	5	6	7
3	To keep healthy.	1	2	3	4	5	6	7
4	To slow the aging process.	1	2	3	4	5	6	7
5	To reduce and prevent any risk of illness/disease.	1	2	3	4	5	6	7
6	To reduce medical costs.	1	2	3	4	5	6	7
7	To ease the excretory system.	1	2	3	4	5	6	7
8	To revitalize physical tiredness.	1	2	3	4	5	6	7
9	To maintain life longevity.	1	2	3	4	5	6	7
10	You saw an advertisement and it convinced you to buy.	1	2	3	4	5	6	7
11	You can rely on the brand.	1	2	3	4	5	6	7
12	You have consumed them for a while.	1	2	3	4	5	6	7
13	You trust the brand.	1	2	3	4	5	6	7
14	This brand is safe.	1	2	3	4	5	6	7
15	Expected outcomes were met when you took them last time.	1	2	3	4	5	6	7
16	Product is inexpensive.	1	2	3	4	5	6	7
17	Medical advice.	1	2	3	4	5	6	7
18	Friends' advice.	1	2	3	4	5	6	7
19	Family members' advice.	1	2	3	4	5	6	7
20	Other.....(*please specify)*	1	2	3	4	5	6	7

<u>Part 2</u> Thinking of <u>the products</u> that you have consumed the most, please answer the following.

This section is about trust in product

After consuming the product, please tick the number that most closely reflects your views.

Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						**Strongly agree**
1	The quality of this product has been very consistent.	1	2	3	4	5	6	7
2	The product has a good performance/quality.	1	2	3	4	5	6	7
3	The production process of the product is trustworthy.	1	2	3	4	5	6	7
4	The quality control process of the product is trustworthy.							
5	The firm of the product is trustworthy.	1	2	3	4	5	6	7
6	The firm of the product keeps its promises made to customers.	1	2	3	4	5	6	7
7	The firm of the product has a reputation for honesty.	1	2	3	4	5	6	7
8	The firm of the product is renowned for attending to customers' needs and wants.	1	2	3	4	5	6	7
9	The quality and safety of the safety are certified by third party organisations or governments (e.g. FDA).	1	2	3	4	5	6	7
10	The product is certified by standard assurances (e.g. GMP, ISO).	1	2	3	4	5	6	7
11	Nutritional benefits are trustworthy (e.g. boosting the immune system, filling a dietary imbalance).	1	2	3	4	5	6	7
12	Nutrition information is trustworthy.	1	2	3	4	5	6	7
13	Ingredient information is trustworthy.	1	2	3	4	5	6	7
14	Side effect information is trustworthy.	1	2	3	4	5	6	7

This section is about your expectations of the product

After consuming the product, please tick the number that most closely reflects your views.

Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						**Strongly agree**
1	Now that you have consumed this product, this product provides the dietary supplements level that you want to be offered.	1	2	3	4	5	6	7
2	Now that you have consumed this product, your needs and wants are fulfilled by this product.	1	2	3	4	5	6	7
3	Now that you have consumed this product, it provides benefits corresponding to its price.	1	2	3	4	5	6	7
4	Now that you have consumed this product, your expectations are higher than before consuming it.	1	2	3	4	5	6	7
5	Overall, the products meet your current expectation.	1	2	3	4	5	6	7

This section is about your satisfaction of the product

After consuming the product, please indicate how satisfied you are with the products?

Seven point Likert scales are employed

Very dissatisfied: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Vary satisfied

Items		Level of satisfaction						
		Very dissatisfied						**Very satisfied**
1	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	1	2	3	4	5	6	7
2	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	1	2	3	4	5	6	7
3	It is a right decision to purchase this product.	1	2	3	4	5	6	7
4	You are satisfied information content with this product.	1	2	3	4	5	6	7
5	You are satisfied with the quality of this product.	1	2	3	4	5	6	7
6	Overall, you are so satisfied with the product.	1	2	3	4	5	6	7

This section is about whether you will buy this product again

Please tick the number that most closely reflects your views.

Seven point Likert scales are employed
Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						Strongly agree
1	The product has a good performance and quality.	1	2	3	4	5	6	7
2	The product makes you feel healthier.	1	2	3	4	5	6	7
3	The product fulfils your needs.	1	2	3	4	5	6	7
4	The product has a reasonable price.	1	2	3	4	5	6	7
5	You have faith in this product.	1	2	3	4	5	6	7
6	It is convenient to buy this product.	1	2	3	4	5	6	7
7	This product can solve your problems/concerns.	1	2	3	4	5	6	7
8	Overall, you intend to continue buying this product, rather than any alternative.	1	2	3	4	5	6	7

<u>Part 3</u> Thinking of <u>the brand or manufacturer</u> that you have consumed the most, please answer the following:

This section is about your experience of the brand

After consuming this brand, please tick the number that most closely reflects your views. Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						Strongly agree
1	You find this brand interesting in a sensory way.	1	2	3	4	5	6	7
2	This brand makes a strong impression on your visual sense or other senses.	1	2	3	4	5	6	7
3	This brand appeals to your senses.	1	2	3	4	5	6	7
4	This brand induces feelings and sentiments.	1	2	3	4	5	6	7
5	You feel great using this brand.	1	2	3	4	5	6	7
6	This brand is an emotional brand.	1	2	3	4	5	6	7
7	This brand stimulates your curiosity and problem solving.	1	2	3	4	5	6	7
8	This brand does not make you consider much.	1	2	3	4	5	6	7
9	You are engaged in a lot of thinking when you encounter this brand.	1	2	3	4	5	6	7
10	This brand results in bodily experience.	1	2	3	4	5	6	7
11	Your body is revitalised when you have consumed this brand.	1	2	3	4	5	6	7
12	You have recognised this brand.	1	2	3	4	5	6	7

This section is about your trust in the brand

After consuming this brand, please tick the number that most closely reflects your views. Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						Strongly agree
1	This brand meets your expectations.	1	2	3	4	5	6	7
2	You feel confidence in this brand.	1	2	3	4	5	6	7
3	This brand never disappoints you.	1	2	3	4	5	6	7
4	This brand guarantees my satisfaction.	1	2	3	4	5	6	7
5	This is an honest and sincere brand	1	2	3	4	5	6	7
6	You could rely on this brand for problem-solving.	1	2	3	4	5	6	7
7	This brand would make any effort to make you be satisfied.	1	2	3	4	5	6	7
8	This brand would compensate you if any problem with this product occurs.	1	2	3	4	5	6	7

This section is about your expectations of the brand

After consuming this brand, please tick the number that most closely reflects your views. Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						Strongly agree
1	Now that you have consumed this brand, this brand provides the dietary supplements level that you want to be offered.	1	2	3	4	5	6	7
2	Now that you have consumed this brand, your needs and wants are fulfilled by this brand.	1	2	3	4	5	6	7
3	Now that you have consumed this brand, it provides benefits corresponding to its price.	1	2	3	4	5	6	7
4	Now that you have consumed this brand, your expectations are higher than before consuming it.	1	2	3	4	5	6	7
5	Overall, this brand meets your current expectation.	1	2	3	4	5	6	7

This section is about your satisfaction of the brand

After consuming the product, please indicate how satisfied you are with the products? Seven point Likert scales are employed

Very dissatisfied: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Vary satisfied

Items		Level of satisfaction						
		Very dissatisfied						Very satisfied
1	You are so satisfied with this brand that you will recommend it to family, friends, and colleagues.	1	2	3	4	5	6	7
2	Providing unexpected performance sometimes impresses you deeply and you are so satisfied	1	2	3	4	5	6	7
3	It is a right decision to purchase this brand.	1	2	3	4	5	6	7
4	You are satisfied information content with this brand.	1	2	3	4	5	6	7
5	You are satisfied with the quality of this brand.	1	2	3	4	5	6	7
6	Overall, you are so satisfied with this brand	1	2	3	4	5	6	7

This section is about whether you will buy this brand again

Please tick the number that most closely reflects your views.

Seven point Likert scales are employed

Strongly disagree: __1__:__2__:__3__:__4__:__5__ : __6__:__7__ Strongly agree

Items		Agreement						
		Strongly disagree						**Strongly agree**
1	This brand has a good performance and quality.	1	2	3	4	5	6	7
2	This brand makes you feel healthier.	1	2	3	4	5	6	7
3	This brand fulfils your needs.	1	2	3	4	5	6	7
4	This brand has a reasonable price.	1	2	3	4	5	6	7
5	You have faith in this brand.	1	2	3	4	5	6	7
6	This brand is convenient to buy.	1	2	3	4	5	6	7
7	This brand can solve your problems/concerns.	1	2	3	4	5	6	7
8	Overall, you intend to continue buying this brand, rather than any alternative.	1	2	3	4	5	6	7

<u>Part 4</u> Demographic information

1. Gender

❒ Male ❒ Female

2. What is your age?

❒ 18-25 years old
❒ 26-35 years old
❒ 36-45 years old
❒ 46-55 years old
❒ 56-65 years old
❒ More than 65 years old

3. What is your main occupation?

❒ Student
❒ Company employee
❒ Government employee
❒ Housewife
❒ Self-employed/Business owner/Freelance
❒ Retired
❒ Other.....*(please specify*)

4. What is your marital status?

❒ Single ❒ Married
❒ Widowed ❒ Divorced

5. Please indicate your highest education qualification: (Please tick only **<u>one</u>** box)

❒ College/technical school/vocational school or equivalent
❒ Bachelor's degree
❒ Master's degree
❒ Doctoral degree

6. Please indicate your total family income per month (Please tick only **<u>one</u>** box)

❒ Less than 20,000 Baht
❒ 20,001-40,000 Baht
❒ 40,001-60,000 Baht
❒ 60,001-80,000 Baht
❒ 60,001-80,000 Baht
❒ 80,001-100,000 Baht
❒ More than 100,000 Baht

Thank you very much for your cooperation!

Appendix A-6 **Questionnaire for pilot study and official survey (Thai version)**

Appendix A-6.1 **Importance information before participation in the survey (Thai version)**

หัวข้องานวิจัย การศึกษาปัจจัยที่มีผลต่อความตั้งใจซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือ: กรณีศึกษาหลักฐานเชิงประจักษ์ในประเทศไทย

ผู้วิจัย นางสาวโสภาพรรณ สัญญาณเสนาะ
นักศึกษาวิจัยระดับบัณฑิตศึกษา, Business and Management Research Institute, University of Bedfordshire, United Kingdom

เรียนผู้ตอบแบบสอบถาม

ดิฉันเป็นนักศึกษาวิจัยระดับบัณฑิตศึกษาที่ สถาบันวิจัยธุรกิจและการจัดการ (Business and Management Research Institute), มหาวิทยาลัยเบดฟอร์ดเชียร์ (University of Bedfordshire) สหราชอาณาจักร แบบสอบถามฉบับนี้เป็นส่วนหนึ่งของงานวิจัยในหัวข้อ “การศึกษาปัจจัยที่มีผลต่อความตั้งใจซื้อซ้ำผลิตภัณฑ์ความน่าเชื่อถือ: กรณีศึกษาหลักฐานเชิงประจักษ์ในประเทศไทย” โดยมุ่งเน้นที่ผลิตภัณฑ์เสริมอาหาร ต้องการขอความร่วมมือและความคิดเห็นจากท่านในการตอบแบบสอบถาม ซึ่งจะใช้เวลาประมาณ 20 นาที และข้อมูลที่ทั้งหมดที่ได้จากการสัมภาษณ์ครั้งนี้ผู้วิจัยจะถูกเก็บเป็นความลับ และขอขอบคุณมา ณ โอกาสนี้ด้วย

หากมีข้อสงสัยหรือไม่เข้าใจกรุณาติดต่อสอบถามผู้วิจัยตามที่อยู่ด้านล่าง

ด้วยความนับถือ
นางสาวโสภาพรรณ สัญญาณเสนาะ

Appendix A-6.2 Screening questionnaire and questionnaire (Thai version)

Appendix A-6.2.1 Screening questionnaire (Thai version)

รหัส.....

การประเมินพฤติกรรมหลังการซื้อ/รับประทานผลิตภัณฑ์เสริมอาหารของผู้บริโภค

คุณ**มี**โรคประจำตัวหรือกำลังอยู่ระหว่างการรักษาโรคหรือไม่

❒ มี (ปิดการสัมภาษณ์)

❒ ไม่มี (โปรดตอบคำถามข้อต่อไป)

ปัจจุบันหรือ ในช่วง 1 ปี หรือ 12 เดือน ที่ผ่านมาคุณเคยรับประทานผลิตภัณฑ์เสริมอาหารหรือไม่

❒ เคย (กรุณาตอบคำถามข้อต่อไป)

❒ ไม่เคย (ปิดการสัมภาษณ์)

ปัจจุบันหรือ ในช่วง 1 ปี หรือ 12 เดือน ที่ผ่านมาคุณได้มีการซื้อซ้ำผลิตภัณฑ์เสริมอาหารหรือไม่

❒ เคย (กรุณาตอบคำถามข้อต่อไป และตอบคำถามต่อส่วนที่ 1-4)

❒ ไม่เคย (ปิดการสัมภาษณ์)

ปัจจุบันคุณอาศัยในเขตพื้นที่ภาคใดของประเทศไทย

❒ ภาคกลาง (รวมภาคตะวันตก,ตะวันออก และกรุงเทพมหานครและปริมณฑล)

❒ ภาคเหนือ

❒ ภาคตะวันออกเฉียงเหนือ

❒ ภาคใต้

Appendix A-6.2.2 Questionnaire (Thai version)

กรุณากรอกแบบสอบถามโดยกาเครื่องหมาย ✓ ลงในช่องว่าง ❒ ในแต่ละคำถามดังต่อไปนี้ให้สมบูรณ์

<u>ส่วนที่ 1</u> ปัจจัยและแนวคิดส่วนบุคคลที่เกี่ยวข้องกับพฤติกรรมการรับประทานและซื้อผลิตภัณฑ์เสริมอาหาร

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด

1. คุณรับประทานผลิตภัณฑ์เสริมอาหาร**<u>วันละกี่ครั้ง</u>**

❒ 1 ครั้ง ❒ 2 ครั้ง ❒ 3 ครั้ง ❒ 4 ครั้ง

2. **<u>ช่วงเวลา</u>**ที่รับประทานผลิตภัณฑ์เสริมอาหารในแต่ละวัน (กรุณาเลือกคำตอบข้อที่ตรงกับพฤติกรรมการรับประทานของคุณมากที่สุด)

❒ ก่อนมื้ออาหาร
❒ หลังมื้ออาหาร
❒ ก่อนนอน
❒ ไม่สามารถระบุเวลาได้/ไม่แน่นอน

3. คุณรับประทานผลิตภัณฑ์เสริมอาหาร**<u>สัปดาห์ละกี่วัน</u>**

❒ ทุกวัน ❒ 1 วัน/สัปดาห์ ❒ 2 วัน/สัปดาห์ ❒3 วัน/สัปดาห์
❒ 4 วัน/สัปดาห์ ❒ 5 วัน/สัปดาห์ ❒ 6 วัน/สัปดาห์

4. คุณซื้อผลิตภัณฑ์เสริมอาหารบ่อยเพียงใดในช่วง 12 เดือน ที่ผ่านมา

❒ 1-2 ครั้ง/ปี ❒ 3-4 ครั้ง/ปี ❒ 5-6 ครั้ง/ปี
❒ 7-8 ครั้ง/ปี ❒ 9-10 ครั้ง/ปี ❒ 11-12 ครั้ง/ปี
❒ มากกว่า 12 ครั้ง/ปี

5. ค่าใช้จ่ายสำหรับผลิตภัณฑ์เสริมอาหารในการซื้อ**<u>แต่ละครั้ง</u>**

❒ น้อยกว่า 500 บาท
❒ 501-1,000 บาท
❒ 1,001-2,000 บาท
❒ 2,001-3,000 บาท
❒ 3,001-4,000 บาท
❒ 4,001-5,000 บาท
❒ มากกว่า 5,000 บาท

6. ชนิดหรือประเภทของผลิตภัณฑ์เสริมอาหารที่คุณรับประทานในปัจจุบันหรือในช่วง 12 เดือนที่ผ่านมา (ระบุได้มากกว่า 1 คำตอบ)

❒ วิตามิน
❒ แร่ธาตุต่างๆ (เช่น แคลเซียม ฟอสฟอรัส ไอโอดีน เหล็ก แมกนีเซียม สังกะสี ทองแดง และโพแทสเซียม)
❒ สมุนไพรหรือผลิตภัณฑ์เสริมอาหารที่สกัดจากพืชธรรมชาติ

7. ยี่ห้อหรือตราสินค้าที่คุณรับประทานบ่อยที่สุด (ระบุเพียง 1 ยี่ห้อ)

❒ แบล็คมอร์
❒ ผลิตภัณฑ์ในเครือแอมเวย์
❒ แบรนด์
❒ อื่นๆ กรุณาระบุ.....

8. กรุณาระบุระดับความสำคัญของเหตุผลในการรับประทานผลิตภัณฑ์เสริมอาหาร โดยกำหนดให้

1=ไม่สำคัญเลย 2=ไม่สำคัญ 3=ไม่ค่อยสำคัญ 4=เฉยๆ/ปานกลาง

5=ค่อนข้างสำคัญ 6=สำคัญมาก 7=สำคัญมากที่สุด

เหตุผล		ข้อคิดเห็น						
		ไม่สำคัญเลย						สำคัญมากที่สุด
1	เพื่อทดแทนและซ่อมแซมส่วนที่สึกหรอของร่างกาย	1	2	3	4	5	6	7
2	เพื่อปรับความสมดุลของร่างกาย	1	2	3	4	5	6	7
3	เพื่อให้มีสุขภาพที่ดี	1	2	3	4	5	6	7
4	เพื่อชะลอการความแก่	1	2	3	4	5	6	7
5	เพื่อลดความเสี่ยงและป้องกันการเกิดโรคต่างๆ	1	2	3	4	5	6	7
6	เพื่อลดค่าใช้จ่ายด้านการรักษาพยาบาล	1	2	3	4	5	6	7
7	เพื่อช่วยระบบการขับถ่าย	1	2	3	4	5	6	7
8	เพื่อฟื้นฟูความเหน็ดเหนื่อยและเมื่อยล้า	1	2	3	4	5	6	7
9	เพื่อให้มีชีวิตที่ยืนยาวมากขึ้น	1	2	3	4	5	6	7
10	เห็นจากโฆษณาทำให้สนใจต้องการซื้อมารับประทาน	1	2	3	4	5	6	7
11	ไว้วางใจในตราสินค้า	1	2	3	4	5	6	7
12	รับประทานมานานแล้ว	1	2	3	4	5	6	7
13	เชื่อมั่นในตราสินค้า	1	2	3	4	5	6	7
14	ตราสินค้ามีความปลอดภัย	1	2	3	4	5	6	7
15	หลังจากรับประทานผลคาดหวังที่เกิดขึ้นตรงกับความต้องการ	1	2	3	4	5	6	7
16	ราคาผลิตภัณฑ์ไม่แพง	1	2	3	4	5	6	7
17	แพทย์แนะนำ	1	2	3	4	5	6	7
18	เพื่อนแนะนำ	1	2	3	4	5	6	7
19	คนในครอบครัวแนะนำ	1	2	3	4	5	6	7
20	อื่นๆ กรุณาระบุ.....	1	2	3	4	5	6	7

<u>ส่วนที่ 2</u> หลังจากที่คุณรับประทานผลิตภัณฑ์เสริมอาหาร กรุณาระบุระดับความคิดเห็นของคุณต่อ<u>ผลิตภัณฑ์เสริมอาหารที่คุณรับประทานบ่อย</u>ที่สุด

(ระบุ ☐วิตามิน ☐แร่ธาตุต่างๆ ☐สมุนไพร)

2.1 ความคิดเห็นค่อความเชื่อ (Trust)

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ/ปานกลาง 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	ผลิตภัณฑ์นี้มีคุณภาพสม่ำเสมอ	1	2	3	4	5	6	7
2	ผลิตภัณฑ์นี้มีคุณภาพที่ดี	1	2	3	4	5	6	7
3	กระบวนการผลิตของผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
4	ระบบคุณภาพของกระบวนการผลิตผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
5	บริษัทเจ้าของผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
6	บริษัทเจ้าของผลิตภัณฑ์รักษาสัญญากับลูกค้า	1	2	3	4	5	6	7
7	บริษัทเจ้าของผลิตภัณฑ์มีชื่อเสียงในความซื่อสัตย์กับลูกค้า	1	2	3	4	5	6	7
8	บริษัทเจ้าของผลิตภัณฑ์มีชื่อเสียงในความเอาใจใส่กับลูกค้า	1	2	3	4	5	6	7
9	คุณภาพและความปลอดภัยของผลิตภัณฑ์ได้รับการรับรองจากหน่วยงานที่น่าเชื่อถือหรือรัฐบาล เช่น อย. ทำให้ผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
10	ผลิตภัณฑ์ผ่านการรับรองระบบมาตรฐาน เช่น GMP, ISO ทำให้ผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
11	ประโยชน์ด้านโภชนาการของผลิตภัณฑ์น่าเชื่อถือ เช่น ช่วยเสริมสร้างระบบสมดุลของร่างกายหรือเพื่อทดแทนและซ่อมแซมส่วนที่สึกหรอของร่างกาย	1	2	3	4	5	6	7
12	ข้อมูลโภชนาการของผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
13	ข้อมูลส่วนผสมของผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7
14	ข้อมูลผลข้างเคียงของผลิตภัณฑ์น่าเชื่อถือ	1	2	3	4	5	6	7

2.2 ความคิดเห็นค่อความคากหวัง (Expectations)

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย

4=เฉยๆ/ปานกลาง 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	หลังจากที่รับประทานผลิตภัณฑ์นี้ ผลิตภัณฑ์นี้ให้ระดับการเสริมอาหารตามที่ต้องการ	1	2	3	4	5	6	7
2	หลังจากที่รับประทานผลิตภัณฑ์นี้ ผลิตภัณฑ์นี้เติมเต็มความต้องการของคุณได้	1	2	3	4	5	6	7
3	หลังจากที่รับประทรานผลิตภัณฑ์นี้ ผลิตภัณฑ์นี้ให้ประโยชน์ที่เหมาะสมกับราคา	1	2	3	4	5	6	7
4	หลังจากที่รับประทานผลิตภัณฑ์นี้ ความคาดหวังที่ได้รับจากผลิตภัณฑ์นี้ในปัจจุบันสูงกว่าความคาดหวังที่ผ่านมา	1	2	3	4	5	6	7

5. หลังจากที่รับประทานผลิตภัณฑ์นี้ ระดับความคาดหวังที่ได้รับในผลิตภัณฑ์นี้โดยรวม

ไม่ตรงกับความคาดหวังเลย 1

ตรงกับความคาดหวัง**น้อยมาก** 2

ตรงกับความคาดหวัง**น้อย** 3

เฉยๆ/ปานกลาง 4

ค่อนข้างตรงกับความคาดหวัง 5

ตรงกับความคาดหวัง**มาก** 6

ตรงกับความคาดหวัง**มากที่สุด** 7

2.3 ความคิดเห็นค่อความพึงพอใจ (Satisfaction)

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่พอใจเลย 2=ไม่พอใจ 3=ไม่ค่อยพอใจ 4=เฉยๆ/ปานกลาง 5=ค่อนข้างพอใจ 6=พอใจมาก 7=พอใจมากที่สุด

รายการ		ระดับความพึงพอใจ						
		ไม่พอใจเลย						พอใจมากที่สุด
1	คุณมีความพึงพอใจที่จะแนะนำผลิตภัณฑ์นี้ให้สมาชิกในครอบครัว เพื่อน และ เพื่อนร่วมงาน	1	2	3	4	5	6	7
2	การได้รับสิ่งที่ไม่คาดหวังจากประสิทธิภาพของผลิตภัณฑ์นี้บางครั้งสร้างความประทับใจให้กับคุณอย่างที่สุดและคุณพึงพอใจ	1	2	3	4	5	6	7
3	คุณมีความพึงพอใจอย่างที่สุดกับการตัดสินใจซื้อผลิตภัณฑ์นี้	1	2	3	4	5	6	7
4	คุณมีความพึงพอใจต่อข้อมูลผลิตภัณฑ์นี้	1	2	3	4	5	6	7
5	คุณมีความพึงพอใจต่อคุณภาพของผลิตภัณฑ์นี้	1	2	3	4	5	6	7
6	โดยรวมคุณมีความพึงพอใจที่จะซื้อผลิตภัณฑ์นี้ต่อไป	1	2	3	4	5	6	7

2.4 ความคิดเห็นต่อการตั้งใจซื้อซ้ำ (Repurchase intention)

กรุณาระบุระดับความคิดเห็นในเหตุผลต่อไปนี้ ที่ทำให้คุณยังคงซื้อซ้ำ ผลิตภัณฑ์เสริมอาหารนี้ต่อไป โดยมีระดับความคิดเห็น ตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	ผลิตภัณฑ์นี้มีประสิทธิภาพและคุณภาพที่ดี	1	2	3	4	5	6	7
2	ผลิตภัณฑ์นี้ทำให้คุณมีสุขภาพที่ดี	1	2	3	4	5	6	7
3	ผลิตภัณฑ์นี้เติมเต็มความต้องการของคุณได้	1	2	3	4	5	6	7
4	ผลิตภัณฑ์นี้มีราคาที่สมเหตุผล	1	2	3	4	5	6	7
5	คุณเชื่อในผลิตภัณฑ์นี้	1	2	3	4	5	6	7
6	ผลิตภัณฑ์นี้หาซื้อได้ง่าย	1	2	3	4	5	6	7
7	ผลิตภัณฑ์นี้สามารถแก้ไขปัญหา/ข้อกังวลที่ของคุณได้	1	2	3	4	5	6	7
8	โดยรวม ความตั้งใจของคุณคือยังคงซื้อผลิตภัณฑ์นี้มากกว่าผลิตภัณฑ์อื่น	1	2	3	4	5	6	7

<u>ส่วนที่ 3.</u> หลังจากที่คุณรับประทานผลิตภัณฑ์เสริมอาหาร กรุณาระบุระดับความคิดเห็นของคุณต่อ<u>ตราสินค้า</u>ของผลิตภัณฑ์เสริมอาหารที่คุณรับประทานบ่อยที่สุด

3.1 ความคิดเห็นต่อประสบการณ์ร่วมกับตราสินค้า (Brand Experience)

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ/ปานกลาง 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	ในความรู้สึกของคุณ คุณพบว่าตราสินค้านี้น่าสนใจ	1	2	3	4	5	6	7
2	จากการที่คุณเห็นด้วยสายตาหรือในความรู้สึกด้านอื่นๆ ตราสินค้านี้ทำให้คุณประทับใจมาก	1	2	3	4	5	6	7
3	ตราสินค้านี้ดึงดูดความรู้สึกคุณ	1	2	3	4	5	6	7
4	ตราสินค้านี้เสริมสร้างความรู้สึกและความระลึกถึง	1	2	3	4	5	6	7
5	คุณรู้สึกดีเมื่อได้ใช้ตราสินค้านี้	1	2	3	4	5	6	7
6	ตราสินค้านี้เสริมสร้างอารมณ์	1	2	3	4	5	6	7
7	ตราสินค้านี้กระตุ้นให้คุณต้องการค้นหาคำตอบและแก้ไขปัญหาที่คุณมีอยู่	1	2	3	4	5	6	7
8	ตราสินค้านี้ไม่ทำให้คุณต้องพิจารณาหรือคิดมาก	1	2	3	4	5	6	7
9	เมื่อคุณรู้จักตราสินค้านี้ทำให้คุณต้องหันมาพิจารณาการซื้อผลิตภัณฑ์จากตราสินค้านี้มากขึ้น	1	2	3	4	5	6	7
10	ตราสินค้านี้ส่งผลต่อพฤติกรรมของคุณ	1	2	3	4	5	6	7
11	คุณมีสุขภาพที่ดีขึ้นเมื่อคุณรับประทานผลิตภัณฑ์จากตราสินค้านี้	1	2	3	4	5	6	7
12	คุณระลึกถึงตราสินค้านี้ได้	1	2	3	4	5	6	7

3.2 ความคิดเห็นต่อความเชื่อในตราสินค้า (Brand Trust)

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ/ปานกลาง 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	ตราสินค้านี้สามารถตอบสนองความคาดหวังของคุณได้	1	2	3	4	5	6	7
2	คุณรู้สึกมั่นใจในตราสินค้านี้	1	2	3	4	5	6	7
3	ตราสินค้านี้ไม่เคยทำให้คุณผิดหวัง	1	2	3	4	5	6	7
4	ตราสินค้านี้รับประกันความพึงพอใจ	1	2	3	4	5	6	7
5	ตราสินค้านี้มีความซื่อสัตย์และจริงใจต่อผู้บริโภค	1	2	3	4	5	6	7
6	คุณสามารถไว้ใจในตราสินค้านี้ในการแก้ปัญหาเกิดขึ้นได้	1	2	3	4	5	6	7
7	ตราสินค้านี้ทำให้คุณพอใจ	1	2	3	4	5	6	7
8	หากเกิดปัญหากับผลิตภัณฑ์ ตราสินค้านี้จะสามารถชดเชยให้กับคุณได้	1	2	3	4	5	6	7

3.3 ความคิดเห็นต่อความคาดหวัง (Expectations) ต่อ<u>ตราสินค้า</u>ที่คุณรับประทานในปัจจุบัน

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ/ปานกลาง 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	หลังจากที่รับประทานตราสินค้านี้ ตราสินค้านี้ให้ระดับการเสริมอาหารตามที่ต้องการ	1	2	3	4	5	6	7
2	หลังจากที่รับประทานผลิตภัณฑ์นี้ ตราสินค้านี้เติมเต็มความต้องการของคุณได้	1	2	3	4	5	6	7
3	หลังจากที่รับประทานตราสินค้านี้ ตราสินค้านี้ให้ประโยชน์ที่เหมาะสมกับราคา	1	2	3	4	5	6	7
4	หลังจากที่รับประทานตราสินค้านี้ ความคาดหวังที่ได้รับจากตราสินค้านี้ในปัจจุบันสูงกว่าความคาดหวังที่ผ่านมา	1	2	3	4	5	6	7

5. หลังจากที่รับประทานตราสินค้านี้ ระดับความคาดหวังที่ได้รับในตราสินค้านี้โดยรวม

ไม่ตรงกับความคาดหวังเลย	1
ตรงกับความคาดหวัง**น้อยมาก**	2
ตรงกับความคาดหวัง**น้อย**	3
เฉยๆ/ปานกลาง	4
ค่อนข้างตรงกับความคาดหวัง	5
ตรงกับความคาดหวัง**มาก**	6
ตรงกับความคาดหวัง**มากที่สุด**	7

3.4 ความพึงพอใจ (Satisfaction) ต่อตราสินค้าที่คุณรับประทานในปัจจุบัน

กรุณาทำเครื่องหมาย ✓ ที่ตรงกับระดับความคิดเห็นของคุณมากที่สุด โดยมีระดับความคิดเห็นตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่พอใจเลย 2=ไม่พอใจ 3=ไม่ค่อยพอใจ 4=เฉยๆ 5=ค่อนข้างพอใจ 6=พอใจมาก 7=พอใจมากที่สุด

รายการ		ระดับความพึงพอใจ						
		ไม่พอใจเลย						พอใจมากที่สุด
1	คุณมีความพึงพอใจที่จะแนะนำตราสินค้านี้ให้สมาชิกในครอบครัว เพื่อน และ เพื่อนร่วมงาน	1	2	3	4	5	6	7
2	การได้รับสิ่งที่ไม่คาดหวังจากประสิทธิภาพของผลิตภัณฑ์นี้บางครั้งสร้างความประทับใจให้กับคุณอย่างที่สุดและคุณพึงพอใจ	1	2	3	4	5	6	7
3	คุณมีความพึงพอใจอย่างที่สุดกับการตัดสินใจซื้อตราสินค้านี้	1	2	3	4	5	6	7
4	คุณมีความพึงพอใจต่อข้อมูลตราสินค้านี้	1	2	3	4	5	6	7
5	คุณมีความพึงพอใจต่อคุณภาพของตราสินค้านี้	1	2	3	4	5	6	7
6	โดยรวมคุณมีความพึงพอใจที่จะซื้อตราสินค้านี้ต่อไป	1	2	3	4	5	6	7

3.5 ความคิดเห็นต่อการตั้งใจซื้อซ้ำ (Repurchase intention)

กรุณาระบุระดับความคิดเห็นในเหตุผลต่อไปนี้ ที่ทำให้คุณยังคงซื้อซ้ำ ผลิตภัณฑ์เสริมอาหารตรา สินค้านี้ต่อไป โดยมีระดับความคิดเห็น ตั้งแต่ ระดับ 1-7 ดังนี้ 1=ไม่เห็นด้วยเลย 2=ไม่เห็นด้วย 3=ไม่ค่อยเห็นด้วย 4=เฉยๆ 5=ค่อนข้างเห็นด้วย 6=เห็นด้วยมาก 7=เห็นด้วยมากที่สุด

รายการ		ระดับความคิดเห็น						
		ไม่เห็นด้วยเลย						เห็นด้วยมากที่สุด
1	ตราสินค้านี้มีประสิทธิภาพและคุณภาพที่ดี	1	2	3	4	5	6	7
2	ตราสินค้านี้ทำให้คุณมีสุขภาพที่ดี	1	2	3	4	5	6	7
3	ตราสินค้านี้เติมเต็มความต้องการของคุณได้	1	2	3	4	5	6	7
4	ตราสินค้านี้มีราคาที่สมเหตุผล	1	2	3	4	5	6	7
5	คุณเชื่อในตราสินค้านี้	1	2	3	4	5	6	7
6	ตราสินค้านี้หาซื้อได้ง่าย	1	2	3	4	5	6	7
7	ตราสินค้านี้สามารถแก้ไขปัญหา/ข้อกังวลที่ของคุณได้	1	2	3	4	5	6	7
8	โดยรวม ความตั้งใจของคุณคือยังคงซื้อตราสินค้านี้มากกว่าตราสินค้าอื่น	1	2	3	4	5	6	7

<u>ส่วนที่ 4</u> ข้อมูลส่วนตัว

1. เพศ ❒ ชาย ❒ หญิง

2. อายุ

❒ 18-25 ปี ❒ 26-35 ปี ❒ 36-45 ปี

❒ 46-55 ปี ❒ 56-65 ปี ❒ มากกว่า 65 ปี

3. อาชีพหลักในปัจจุบัน

❒ นักเรียน/นักศึกษา ❒ พนักงานบริษัท ❒ ข้าราชการ/พนักงานของรัฐ

❒ แม่บ้าน ❒ ธุรกิจส่วนตัว/เจ้าของกิจการ/อาชีพอิสระ

❒ พนักงานบริษัท ❒ เกษียนอายุ ❒ อื่น ๆ กรุณาระบุ .....

4. สถานภาพสมรส

❒ โสด ❒ แต่งงาน ❒หม้าย ❒ หย่าร้าง

5. การศึกษาระดับสูงสุดในปัจจุบัน

❒ มัยมปลาย (ม.6), ปวช. ❒ ปริญญาตรี ❒ปริญญาโท ❒ ปริญญาเอก

6. รายได้ครอบครัวต่อเดือน

❒ น้อยกว่า 20,000 บาท ❒20,001-40,000 บาท ❒40,001-60,000 บาท

❒ 60,001-80,000 บาท ❒80,001-100,000 บาท ❒มากกว่า 100,000 บาท

ขอขอบคุณทุกท่านที่เสียสละเวลา และให้ความร่วมมือในการตอบแบบสอบถาม

Appendix A-7 Guidelines for indentifying significant factor loading based on sample size

Factor loading	Sample size needed for significance*
.30	350
.35	250
.40	200
.45	150
.50	120
.55	100
.60	85
.65	70
.70	60
.75	50

Adaptive from Hair *et al.* (2010)

* Significance is based on *.05 significance level (α), a power level of 80 percent, and standard errors assumed to be twice those of conventional correlation coefficients.

Appendix A-8 The Cronbach's alpha of pilot respondents

Appendix A-8.1 The Cronbach's alpha of personal factors and self concept

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if Item Deleted
To replace any nutrient deficiency.	0.448	0.752
To enhance the immune system.	0.555	0.744
To keep healthy.	0.429	0.754
To slow the aging process.	0.525	0.743
To reduce and prevent any risk of illness/disease.	0.353	0.757
To reduce medical costs.	0.399	0.754
To ease the excretory system.	0.343	0.758
To revitalize physical tiredness.	0.427	0.751
To maintain life longevity.	0.561	0.739
You saw an advertisement and it convinced you to buy.	0.213	0.767
You can rely on the brand.	0.557	0.749
You have consumed them for a while.	0.314	0.760
You trust the brand.	0.490	0.751
This brand is safe.	0.333	0.759
Expected outcomes were met when you took them last time.	0.393	0.757
Product is inexpensive.	0.108	0.773
Medical advice.	-.0.061	0.796
Friends' advice.	0.294	0.766
Family members' advice.	0.237	0.771

Appendix A-8.2 The Cronbach's alpha of consumers' product perspective

Appendix A-8.2.1 The Cronbach's alpha of trust

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
The quality of this product has been very consistent.	0.673	0.936
The product has a good performance/quality.	0.747	0.934
The production process of the product is trustworthy.	0.743	0.934
The quality control process of the product is trustworthy.	0.797	0.933
The firm of the product is trustworthy.	0.695	0.936
The firm of the product keeps its promises made to customers.	0.460	0.942
The firm of the product has a reputation for honesty.	0.685	0.936
The firm of the product is renowned for attending to customers' needs and wants.	0.711	0.935
The quality and safety of the safety are certified by third party organisations or governments (e.g. FDA).	0.596	0.938
The product is certified by standard assurances (e.g. GMP, ISO).	0.635	0.937
Nutritional benefits are trustworthy (e.g. boosting the immune system, filling a diet balance).	0.765	0.934
Nutrition information is trustworthy.	0.766	0.934
Ingredients information is trustworthy.	0.815	0.932
Side effect information is trustworthy.	0.769	0.934

Appendix A-8.2.2 The Cronbach's alpha of expectations

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if Item Deleted
Now that you have consumed this product, this product provides the dietary supplements level that you want to be offered.	0.733	0.849
Now that you have consumed this product, your needs and wants are fulfilled by this product.	0.809	0.828
Now that you have consumed this product, it provides benefits corresponding to its price.	0.671	0.862
Now that you have consumed this product, your expectations are higher than before consuming it.	0.748	0.846
Overall, the products meet your current expectation.	0.620	0.878

Appendix A-8.2.3 The Cronbach's alpha of satisfaction

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	0.706	0.913
Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	0.811	0.897
It is a right decision to purchase this product.	0.806	0.898
You are satisfied with information content this product.	0.847	0.894
You are satisfied with the quality of this product.	0.793	0.900
Overall, you are so satisfied with the product.	0.660	0.917

Appendix A-8.2.4 The Cronbach's alpha of repurchase intentions

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
The product has a good performance and quality.	0.732	0.841
The product makes you feel healthier.	0.747	0.841
The product fulfils your needs.	0.747	0.839
The product has a reasonable price.	0.360	0.887
You have faith in this product.	0.679	0.849
It is convenient to buy this product.	0.450	0.871
This product can solve my problems/concerns.	0.530	0.864
Overall, you intend to continue buying this product, rather than any alternative.	0.835	0.831

Appendix A-8.3 The Cronbach's alpha of consumers' brand perspective

Appendix A-8.3.1 The Cronbach's alpha of brand experience

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
You find this brand interesting in a sensory way.	0.654	0.929
This brand makes a strong impression on your visual sense or other senses.	0.651	0.929
This brand appeal to your senses.	0.666	0.929
This brand induces feelings and sentiments.	0.655	0.929
You feel great using this brand.	0.750	0.925
This brand is an emotional brand.	0.614	0.931
This brand stimulates your curiosity and problem solving.	0.681	0.928
This brand does not make you consider much.	0.726	0.926
You are engaged in a lot of thinking when you encounter this brand.	0.787	0.924
This brand results in bodily experience.	0.728	0.926
Your body is revitalised when you have consumed this brand.	0.765	0.925
You have recognised this brand.	0.819	0.923

Appendix A-8.3.2 The Cronbach's alpha of brand trust

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
This brand meets your expectations.	0.783	0.942
You feel confidence in this brand.	0.830	0.939
This brand never disappoints you.	0.889	0.936
This brand guarantees my satisfaction.	0.860	0.937
This is an honest and sincere brand.	0.798	0.941
You could rely on this brand for problem solving.	0.823	0.939
This brand would make any effort to make you be satisfied.	0.863	0.937
This brand would compensate you if any problem with this product occurs.	0.660	0.952

Appendix A-8.3.3 The Cronbach's alpha of expectations

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
Now that you have consumed this brand, this brand provides the dietary supplement level that you want to be offered.	0.810	0.843
Now that you have consumed this brand, your needs and wants are fulfilled by this brand.	0.709	0.867
Now that you have consumed this brand, it provides benefits corresponding to its price.	0.712	0.865
Now that you have consumed this brand, your expectations are higher than before consuming it.	0.760	0.855
Overall, the products meet your current expectation.	0.687	0.880

Appendix A-8.3.4 The Cronbach's alpha of satisfaction

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
You are so satisfied with this brand that you will recommend it to family, friends, and colleagues.	0.787	0.927
Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	0.765	0.930
It is a right decision to purchase this brand.	0.711	0.936
You are satisfied with information content this brand.	0.883	0.914
You are satisfied with the quality of this brand.	0.844	0.919
Overall, you are so satisfied with this brand.	0.869	0.917

Appendix A-8.3.5 The Cronbach's alpha of repurchase intentions

Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
This brand has a good performance and quality.	0.880	0.899
This brand makes you feel healthier.	0.854	0.900
This brand fulfils your needs.	0.723	0.911
This brand has a reasonable price.	0.615	0.919
You have faith in this brand.	0.767	0.908
This brand is convenient to buy.	0.461	0.931
This brand can solve my problems/concerns.	0.724	0.911
Overall, you intend to continue buying this brand, rather than any alternative.	0.868	0.899

Appendix B

Finding of main study

Appendix B-1 Descriptive statistics

Appendix B-1.1 Descriptive statistics for consumers' product perspective

No.	Variables	N	Min	Max	Mean	S.D.	Skewness	Kurtosis
1	TP1	504	1	7	5.52	1.072	-0.722	0.733
2	TP2	504	2	7	5.65	1.016	-0.500	-0.067
3	TP3	504	2	7	5.66	1.041	-0.407	-0.468
4	TP4	504	2	7	5.70	1.022	-0.360	-0.534
5	TP5	504	1	7	5.58	1.139	-0.575	0.147
6	TP6	504	1	7	5.23	1.289	-0.467	-0.123
7	TP7	504	2	7	5.38	1.207	-0.272	-0.766
8	TP8	504	3	7	5.35	1.187	-0.226	-0.938
9	TP9	504	2	7	6.01	1.038	-0.947	0.550
10	TP10	504	2	7	5.80	1.110	-0.566	-0.575
11	TP11	504	2	7	5.73	0.983	-0.405	-0.301
12	TP12	504	2	7	5.57	1.043	-0.70	-0.234
13	TP13	504	2	7	5.48	1.097	-0.529	0.247
14	TP14	504	1	7	5.32	1.186	-0.542	0.430
15	EP1	504	3	7	5.34	0.968	-0.429	-0.074
16	EP2	504	1	7	5.37	1.060	-0.568	0.466
17	EP3	504	1	7	5.38	1.048	-0.514	0.363
18	EP4	504	1	7	5.38	1.058	-0.641	0.882
19	EP5	504	1	7	5.22	1.067	-0.813	1.512
20	SP1	504	1	7	5.30	1.135	-0.301	-0.050
21	SP2	504	1	7	5.28	1.037	-0.146	-0.206
22	SP3	504	2	7	5.45	1.033	-0.306	-0.492
23	SP4	504	3	7	5.51	1.017	-0.391	-0.318
24	SP5	504	3	7	5.56	0.991	-0.338	-0.467
25	SP6	504	3	7	5.54	1.010	-0.312	-0.534
26	RP1	504	2	7	5.63	0.905	-0.374	0.022
27	RP2	504	2	7	5.67	1.010	-0.338	-0.496
28	RP3	504	3	7	5.54	1.028	-0.146	-0.857
29	RP4	504	1	7	5.30	1.091	-0.283	0.008
30	RP5	504	2	7	5.62	1.008	-0.310	-0.559
31	RP6	504	1	7	5.68	1.210	-0.649	-0.023
32	RP7	504	1	7	5.45	1.146	-0.602	0.451
33	RP8	504	1	7	5.50	1.074	-0.523	0.276

Appendix B-1.2 Descriptive statistics for consumers' brand perspective

No.	Variables	N	Min	Max	Mean	S.D.	Skewness	Kurtosis
1	BEB1	504	2	7	5.53	0.939	-0.545	0.230
2	BEB2	504	2	7	5.44	0.997	-0.287	-0.349
3	BEB3	504	1	7	5.31	1.109	0.560	0.657
4	BEB4	504	1	7	5.30	1.105	-0.609	0.886
5	BEB5	504	1	7	5.38	1.102	-1.226	2.662
6	BEB6	504	1	7	5.04	1.187	-0.557	0.618
7	BEB7	504	1	7	5.22	1.218	-0.867	0.992
8	BEB8	504	1	7	5.38	1.129	-0.614	0.600
9	BEB9	504	1	7	5.44	1.098	-0.608	0.734
10	BEB10	504	1	7	5.29	1.122	-0.610	0.579
11	BEB11	504	1	7	5.50	1.015	-0.464	0.218
12	BEB12	504	1	7	5.44	1.009	-0.484	0.648
13	BTB1	504	1	7	5.22	0.981	-0.588	1.236
14	BTB2	504	2	7	5.44	1.087	-0.272	-0.349
15	BTB3	504	1	7	5.15	1.057	-0.079	-0.261
16	BTB4	504	2	7	5.30	1.143	-0.244	-0.507
17	BTB5	504	1	7	5.29	1.088	-0.209	-0.017
18	BTB6	504	2	7	5.19	1.061	-0.007	-0.543
19	BTB7	504	3	7	5.35	0.983	-0.047	-0.660
20	BTB8	504	1	7	5.19	1.203	-0.522	-0.463
21	EB1	504	2	7	5.38	0.946	-0.510	0.223
22	EB2	504	1	7	5.39	1.018	-0.326	0.095
23	EB3	504	1	7	5.43	1.081	-0.465	0.292
24	EB4	504	1	7	5.37	1.024	-0.484	0.459
25	EB5	504	1	7	5.22	1.077	-0.739	1.445
26	SB1	504	1	7	5.33	1.104	-0.319	-0.032
27	SB2	504	1	7	5.33	1.063	-0.389	0.037
28	SB3	504	1	7	5.46	1.050	-0.571	0.409
29	SB4	504	1	7	5.48	1.042	-0.418	0.357
30	SB5	504	1	7	5.46	1.073	-0.366	-0.005
31	SB6	504	1	7	5.49	1.076	-0.427	0.061
32	RB1	504	1	7	5.54	0.955	-0.621	0.795
33	RB2	504	3	7	5.72	1.005	-0.410	-0.412
34	RB3	504	2	7	5.51	1.013	-0.304	-0.442
35	RB4	504	1	7	5.39	1.078	-0.396	0.113
36	RB5	504	1	7	5.65	0.990	-0.430	0.204
37	RB6	504	1	7	5.67	1.211	-1.123	2.109
38	RB7	504	1	7	5.44	1.089	-0.469	0.080
39	RB8	504	1	7	5.49	1.053	-0.558	0.614

Appendix B-2 Reliability test

Appendix B-2.1 Reliability test for consumers' product perspective

Appendix B-2.1.1 Trust

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
TP1	The quality of this product has been very consistent.	0.597	0.932
TP2	The product has a good performance/quality.	0.667	0.931
TP3	The production process of the product is trustworthy.	0.777	0.927
TP4	The quality control process of the product is trustworthy.	0.733	0.929
TP5	The firm of the product is trustworthy.	0.695	0.930
TP6	The firm of the product keeps its promises made to customers.	0.680	0.930
TP7	The firm of the product has a reputation for honesty.	0.759	0.928
TP8	The firm of the product is renowned for attending to customers' needs and wants.	0.700	0.930
TP9	The quality and safety of the safety are certified by third party organisations or governments (e.g. FDA).	0.648	0.931
TP10	The product is certified by standard assurances (e.g. GMP, ISO).	0.615	0.932
TP11	Nutritional benefits are trustworthy (e.g. boosting the immune system, filling a diet balance).	0.674	0.930
TP12	Nutrition information is trustworthy.	0.715	0.929
TP13	Ingredients information is trustworthy.	0.709	0.929
TP14	Side effect information is trustworthy.	0.661	0.931

Appendix B-2.1.2 Expectation

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
EP1	Now that you have consumed this product, this product provides the dietary supplements level that you want to be offered.	0.793	0.892
EP2	Now that you have consumed this product, your needs and wants are fulfilled by this product.	0.796	0.890
EP3	Now that you have consumed this product, it provides benefits corresponding to its price.	0.788	0.892
EP4	Now that you have consumed this product, your expectations are higher than before consuming it.	0.819	0.885
EP5	Now that you have consumed this product, what is your current expectation in general?	0.704	0.909

Appendix B-2.1.3 Satisfaction

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
SP1	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	0.639	0.928
SP2	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	0.724	0.915
SP3	It is a right decision to purchase this product.	0.852	0.897
SP4	You are satisfied with this product.	0.828	0.901
SP5	You are satisfied with the quality of this product.	0.805	0.904
SP6	Overall, you are so satisfied with the product that you will repurchase.	0.831	0.900

Appendix B-2.1.4 Repurchase intentions

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
RP1	The product has a good performance and quality.	0.754	0.901
RP2	The product makes you feel healthier.	0.769	0.899
RP3	The product fulfils your needs.	0.764	0.899
RP4	The product has a reasonable price.	0.664	0.907
RP5	You have faith in this product.	0.770	0.898
RP6	It is convenient to buy this product.	0.597	0.915
RP7	This product can solve my problems/concerns.	0.707	0.904
RP8	Overall, you intend to continue buying this product, rather than any alternative.	0.765	0.899

Appendix B-2.2 Reliability test for consumers' brand perspective

Appendix B-2.2.1 Brand experience

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
BEB1	You find this brand interesting in a sensory way.	0.689	0.942
BEB2	This brand makes a strong impression on your visual sense or other senses.	0.697	0.941
BEB3	This brand appeal to your senses.	0.758	0.939
BEB4	This brand induces feelings and sentiments.	0.715	0.941
BEB5	You feel great using this brand.	0.783	0.938
BEB6	This brand is an emotional brand.	0.725	0.941
BEB7	This brand stimulates your curiosity and problem solving.	0.735	0.940
BEB8	This brand does not make you consider much.	0.767	0.939
BEB9	You are engaged in a lot of thinking when you encounter this brand.	0.796	0.938
BEB10	This brand results in bodily experience.	0.770	0.939
BEB11	Your body is revitalised when you have consumed this brand.	0.727	0.940
BEB12	You have recognised this brand.	0.770	0.939

Appendix B-2.2.2 Brand trust

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
BTB1	You find this brand interesting in a sensory way.	0.718	0.922
BTB2	This brand makes a strong impression on your visual sense or other senses.	0.743	0.920
BTB3	This brand appeal to your senses.	0.777	0.917
BTB4	This brand induces feelings and sentiments.	0.775	0.917
BTB5	You feel great using this brand.	0.773	0.918
BTB6	This brand is an emotional brand.	0.771	0.918
BTB7	This brand stimulates your curiosity and problem solving.	0.819	0.915
BTB8	This brand does not make you consider much.	0.681	0.926

Appendix B-2.2.3 Expectation

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
EB1	Now that you have consumed this product, this product provides the dietary supplements level that you want to be offered.	0.895	0.895
EB2	Now that you have consumed this product, your needs and wants are fulfilled by this product.	0.891	0.891
EB3	Now that you have consumed this product, it provides benefits corresponding to its price.	0.898	0.898
EB4	Now that you have consumed this product, your expectations are higher than before consuming it.	0.888	0.888
EB5	Now that you have consumed this product, what is your current expectation in general?	0.899	0.899

Appendix B-2.2.4 Satisfaction

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
SB1	You are so satisfied with the product that you will recommend it to family, friends, and colleagues.	0.769	0.942
SB2	Providing unexpected performance sometimes impresses you deeply and you are so satisfied.	0.814	0.937
SB3	It is a right decision to purchase this product.	0.845	0.933
SB4	You are satisfied with this product.	0.845	0.933
SB5	You are satisfied with the quality of this product.	0.843	0.933
SB6	Overall, you are so satisfied with the product that you will repurchase.	0.882	0.929

Appendix B-2.2.5 Repurchase intentions

No.	Subscale items	Corrected item-Total Correlation	Cronbach's Alpha if item deleted
RB1	The product has a good performance and quality.	0.752	0.902
RB2	The product makes you feel healthier.	0.784	0.899
RB3	The product fulfils your needs.	0.759	0.901
RB4	The product has a reasonable price.	0.685	0.907
RB5	You have faith in this product.	0.764	0.901
RB6	It is convenient to buy this product.	0.551	0.921
RB7	This product can solve my problems/concerns.	0.742	0.903
RB8	Overall, you intend to continue buying this product, rather than any alternative.	0.783	0.899

Appendix B-3 Hypothesis testing by structural equation modelling (SEM)

Appendix B-3.1 Accessing the measurement model validity: confirmation factor analysis (CFA) for consumers' product perspective

Appendix B-3.1.1 Model summary

The model is recursive.
Sample size = 504

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	29	0	0	0	0	29
Labeled	0	0	0	0	0	0
Unlabeled	25	3	29	0	0	57
Total	54	3	29	0	0	86

Number of distinct sample moments:	351
Number of distinct parameters to be estimated:	57
Degrees of freedom (351 - 57):	294

Minimum was achieved
Chi-square = 2118.735
Degrees of freedom = 294
Probability level = .000

Variable counts (Group number 1)

Number of variables in your model:	55
Number of observed variables:	26
Number of unobserved variables:	29
Number of exogenous variables:	29
Number of endogenous variables:	26

Appendix B-3.1.2 Parameter estimated

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
TP1	<---	Trust	1.000				
TP2	<---	Trust	1.032	.073	14.109	***	
TP3	<---	Trust	1.210	.077	15.751	***	
TP4	<---	Trust	1.128	.075	15.108	***	
TP5	<---	Trust	1.177	.082	14.308	***	
TP6	<---	Trust	1.294	.093	13.967	***	
TP7	<---	Trust	1.343	.088	15.201	***	
TP8	<---	Trust	1.234	.086	14.379	***	
TP9	<---	Trust	1.008	.074	13.579	***	
TP10	<---	Trust	1.008	.079	12.826	***	
TP11	<---	Trust	.981	.071	13.899	***	
TP12	<---	Trust	1.099	.076	14.545	***	
TP13	<---	Trust	1.141	.079	14.381	***	
TP14	<---	Trust	1.162	.085	13.683	***	
EP1	<---	Expectation	1.000				
EP2	<---	Expectation	1.089	.047	23.319	***	
EP3	<---	Expectation	1.069	.046	23.028	***	
EP4	<---	Expectation	1.114	.046	24.278	***	
EP5	<---	Expectation	.992	.050	19.969	***	
SP1	<---	Satisfaction	1.000				
SP2	<---	Satisfaction	1.028	.070	14.598	***	
SP3	<---	Satisfaction	1.226	.073	16.869	***	
SP4	<---	Satisfaction	1.222	.072	17.029	***	
SP5	<---	Satisfaction	1.174	.070	16.838	***	
SP6	<---	Satisfaction	1.217	.071	17.064	***	
RP8	<---	Trust	.099	.090	1.106	.269	
RP8	<---	Satisfaction	.656	.100	6.577	***	
RP8	<---	Expectation	.360	.091	3.953	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
TP1	<---	Trust	.649
TP2	<---	Trust	.707
TP3	<---	Trust	.809
TP4	<---	Trust	.768
TP5	<---	Trust	.719
TP6	<---	Trust	.699
TP7	<---	Trust	.774
TP8	<---	Trust	.723
TP9	<---	Trust	.676
TP10	<---	Trust	.632
TP11	<---	Trust	.695
TP12	<---	Trust	.733
TP13	<---	Trust	.724
TP14	<---	Trust	.682
EP1	<---	Expectation	.843
EP2	<---	Expectation	.838
EP3	<---	Expectation	.832
EP4	<---	Expectation	.859
EP5	<---	Expectation	.758
SP1	<---	Satisfaction	.651
SP2	<---	Satisfaction	.732
SP3	<---	Satisfaction	.877
SP4	<---	Satisfaction	.888
SP5	<---	Satisfaction	.875
SP6	<---	Satisfaction	.890
RP8	<---	Trust	.064
RP8	<---	Satisfaction	.451
RP8	<---	Expectation	.273

Appendix B-3.1.3 Explained variance and residual variances

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
RP8	.554
SP6	.792
SP5	.765
SP4	.788
SP3	.768
SP2	.536
SP1	.423
EP5	.575
EP4	.738
EP3	.692
EP2	.703
EP1	.710
TP14	.465
TP13	.523
TP12	.538
TP11	.482
TP10	.400
TP9	.457
TP8	.523
TP7	.599
TP6	.488
TP5	.517
TP4	.590
TP3	.655
TP2	.500
TP1	.422

Appendix B-3.1.4 Model fit summary

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	57	2118.735	294	.000	7.207
Saturated model	351	.000	0		
Independence model	26	11028.292	325	.000	33.933

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.073	.730	.677	.611
Saturated model	.000	1.000		
Independence model	.565	.132	.063	.123

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.808	.788	.830	.812	.830
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.905	.731	.750
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.111	.107	.116	.000
Independence model	.256	.252	.260	.000

Appendix B-3.1.5 Modification indices

Regression Weights: (Group number 1 - Default model)

			M.I.	Par Change
SP6	<---	SP5	6.176	.057
SP6	<---	SP2	4.184	-.045
SP6	<---	SP1	4.279	-.042
SP6	<---	EP4	10.892	-.071
SP6	<---	EP3	4.092	-.044
SP6	<---	TP14	7.591	-.053
SP5	<---	SP6	5.274	.053
SP5	<---	SP2	17.086	-.094
SP5	<---	SP1	10.308	-.066
SP5	<---	EP4	5.543	-.052
SP5	<---	EP3	4.158	-.046
SP5	<---	EP1	11.667	-.083
SP5	<---	TP10	8.316	-.061
SP5	<---	TP8	13.292	-.072
SP5	<---	TP7	6.229	-.049
SP5	<---	TP6	11.011	-.060
SP5	<---	TP5	11.425	-.070
SP4	<---	SP1	5.460	-.048
SP3	<---	SP2	8.521	.068
SP3	<---	SP1	4.241	.044
SP3	<---	TP10	5.083	.049
SP3	<---	TP6	9.179	.057

			M.I.	Par Change
SP2	<---	Expectation	4.524	.088
SP2	<---	Trust	4.414	.101
SP2	<---	SP5	7.671	-.091
SP2	<---	SP1	23.536	.139
SP2	<---	EP4	4.043	.062
SP2	<---	EP3	7.027	.082
SP2	<---	EP2	6.074	.075
SP2	<---	EP1	7.447	.092
SP2	<---	TP10	15.348	.115
SP2	<---	TP8	9.904	.086
SP2	<---	TP7	19.273	.118
SP2	<---	TP6	12.304	.088
SP1	<---	Expectation	8.171	.142
SP1	<---	SP2	18.518	.163
SP1	<---	EP4	19.956	.165
SP1	<---	EP3	4.793	.082
SP1	<---	EP2	12.816	.132
SP1	<---	TP14	9.583	.102
SP1	<---	TP6	8.062	.086
SP1	<---	TP1	8.003	.103
EP5	<---	Satisfaction	7.679	.125
EP5	<---	SP6	14.576	.123
EP5	<---	SP5	14.093	.123
EP5	<---	SP4	8.601	.094
EP5	<---	TP13	6.103	.073
EP5	<---	TP8	7.001	-.073
EP4	<---	SP6	6.108	-.066
EP4	<---	SP1	8.585	.069
EP4	<---	TP6	8.613	.061
EP4	<---	TP5	4.483	.050
EP3	<---	TP10	7.252	-.068
EP2	<---	TP13	4.319	-.053
EP2	<---	TP6	4.449	-.046
EP2	<---	TP2	6.339	.070
EP1	<---	TP12	7.744	.068
TP14	<---	SP1	4.758	.076
TP14	<---	TP13	91.355	.345
TP14	<---	TP12	25.032	.190
TP14	<---	TP6	6.203	.077
TP14	<---	TP5	17.225	-.145
TP14	<---	TP4	13.773	-.144
TP14	<---	TP3	4.508	-.081
TP14	<---	TP1	4.625	-.080
TP13	<---	TP14	103.979	.300
TP13	<---	TP12	56.520	.251
TP13	<---	TP6	4.081	-.055
TP13	<---	TP5	17.428	-.128
TP13	<---	TP4	14.094	-.128
TP13	<---	TP2	4.097	-.069
TP12	<---	TP14	29.501	.150

			M.I.	Par Change
TP12	<---	TP13	58.523	.228
TP12	<---	TP11	7.563	.091
TP12	<---	TP10	4.027	.059
TP12	<---	TP8	8.965	-.082
TP12	<---	TP6	12.640	-.090
TP12	<---	TP5	9.585	-.089
TP12	<---	TP4	9.716	-.100
TP11	<---	EP2	4.864	.067
TP11	<---	TP12	6.660	.080
TP11	<---	TP10	21.468	.135
TP11	<---	TP6	9.218	-.076
TP10	<---	SP2	5.280	.087
TP10	<---	TP11	18.224	.170
TP10	<---	TP9	17.543	.158
TP10	<---	TP3	4.673	-.081
TP10	<---	TP2	6.846	-.101
TP10	<---	TP1	20.144	-.164
TP9	<---	SP5	4.402	.074
TP9	<---	TP10	19.577	.139
TP9	<---	TP6	8.159	-.077
TP8	<---	EP5	9.726	-.110
TP8	<---	TP12	8.655	-.106
TP8	<---	TP7	36.295	.188
TP8	<---	TP6	9.004	.088
TP8	<---	TP2	5.406	-.086
TP7	<---	SP2	8.758	.102
TP7	<---	TP10	4.411	.067
TP7	<---	TP9	4.787	-.075
TP7	<---	TP8	44.216	.199
TP7	<---	TP6	44.961	.185
TP7	<---	TP5	7.275	.084
TP7	<---	TP2	13.315	-.128
TP7	<---	TP1	13.549	-.122
TP6	<---	SP5	4.496	-.090
TP6	<---	EP2	4.486	-.084
TP6	<---	TP14	6.517	.091
TP6	<---	TP12	11.267	-.136
TP6	<---	TP11	9.331	-.131
TP6	<---	TP9	8.718	-.120
TP6	<---	TP8	8.313	.103
TP6	<---	TP7	34.076	.204
TP6	<---	TP5	31.532	.208
TP6	<---	TP1	17.657	-.166
TP5	<---	SP5	9.121	-.111
TP5	<---	SP4	5.256	-.082
TP5	<---	TP14	19.315	-.135
TP5	<---	TP13	17.171	-.137
TP5	<---	TP12	9.120	-.105
TP5	<---	TP7	5.885	.073
TP5	<---	TP6	33.659	.164

			M.I.	Par Change
TP5	<---	TP4	18.413	.153
TP4	<---	EP2	4.860	-.063
TP4	<---	TP14	18.606	-.111
TP4	<---	TP13	16.728	-.113
TP4	<---	TP12	11.137	-.097
TP4	<---	TP5	22.181	.126
TP4	<---	TP3	28.662	.157
TP3	<---	SP3	5.102	-.063
TP3	<---	SP2	4.054	-.056
TP3	<---	TP14	7.433	-.066
TP3	<---	TP13	4.946	-.058
TP3	<---	TP10	8.745	-.077
TP3	<---	TP4	34.986	.167
TP3	<---	TP2	16.276	.115
TP3	<---	TP1	10.914	.089
TP2	<---	Expectation	7.030	.111
TP2	<---	RP8	7.445	.084
TP2	<---	EP5	7.675	.086
TP2	<---	EP3	6.157	.078
TP2	<---	EP2	17.644	.131
TP2	<---	EP1	4.072	.069
TP2	<---	TP10	8.381	-.086
TP2	<---	TP8	5.124	-.063
TP2	<---	TP7	10.361	-.088
TP2	<---	TP3	10.645	.103
TP2	<---	TP1	65.611	.249
TP1	<---	Expectation	10.175	.150
TP1	<---	RP8	5.211	.079
TP1	<---	SP5	5.030	.084
TP1	<---	SP4	5.691	.087
TP1	<---	SP1	8.198	.094
TP1	<---	EP5	6.904	.091
TP1	<---	EP4	6.495	.089
TP1	<---	EP3	9.360	.108
TP1	<---	EP2	13.989	.131
TP1	<---	EP1	11.515	.130
TP1	<---	TP14	4.245	-.064
TP1	<---	TP10	20.983	-.153
TP1	<---	TP7	8.970	-.092
TP1	<---	TP6	15.425	-.113
TP1	<---	TP3	6.074	.088
TP1	<---	TP2	55.829	.273

Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e25	<-->	Satisfaction	4.662	.022
e25	<-->	Expectation	6.711	-.030
e25	<-->	res1	5.689	.040
e24	<-->	Satisfaction	11.232	.036
e24	<-->	Expectation	5.992	-.029
e24	<-->	res1	4.180	.035
e24	<-->	e25	30.054	.064
e23	<-->	e24	19.263	.052
e21	<-->	Satisfaction	14.403	-.057
e21	<-->	Expectation	8.406	.048
e21	<-->	Trust	4.141	.030
e21	<-->	e25	9.439	-.051
e21	<-->	e24	38.650	-.105
e21	<-->	e22	19.270	.077
e20	<-->	Satisfaction	20.323	-.081
e20	<-->	Expectation	21.748	.093
e20	<-->	e25	7.639	-.055
e20	<-->	e24	18.432	-.088
e20	<-->	e23	9.751	-.063
e20	<-->	e22	7.582	.059
e20	<-->	e21	42.310	.185
e19	<-->	Satisfaction	28.088	.079
e19	<-->	Expectation	13.154	-.059
e19	<-->	e25	11.963	.058
e19	<-->	e24	9.901	.054
e19	<-->	e21	7.178	-.063
e18	<-->	e25	20.184	-.062
e18	<-->	e22	13.797	.054
e18	<-->	e20	20.739	.107
e17	<-->	e23	6.260	.037
e17	<-->	e18	4.192	.034
e16	<-->	Satisfaction	4.195	-.026
e16	<-->	e23	4.853	-.032
e16	<-->	e20	6.423	.063
e16	<-->	e18	5.157	.038
e16	<-->	e17	6.260	-.044
e15	<-->	e24	14.891	-.052
e15	<-->	e21	4.120	.038
e15	<-->	e19	5.663	-.044
e15	<-->	e18	9.332	-.046
e15	<-->	e16	11.416	.053
e14	<-->	e25	9.935	-.064
e14	<-->	e20	6.660	.090
e13	<-->	e19	9.661	.079
e13	<-->	e16	6.955	-.058
e13	<-->	e14	203.536	.441
e12	<-->	e15	11.013	.062
e12	<-->	e14	57.735	.220
e12	<-->	e13	130.231	.291

			M.I.	Par Change
e11	<-->	e19	7.824	-.066
e11	<-->	e16	8.933	.061
e11	<-->	e13	4.161	.051
e11	<-->	e12	15.357	.093
e10	<-->	e24	4.931	-.046
e10	<-->	e22	6.007	.052
e10	<-->	e21	11.938	.098
e10	<-->	e17	8.098	-.070
e10	<-->	e12	6.949	.075
e10	<-->	e11	37.068	.172
e9	<-->	Satisfaction	6.396	.041
e9	<-->	e11	4.407	.053
e9	<-->	e10	33.811	.177
e8	<-->	e24	11.595	-.067
e8	<-->	e21	6.233	.068
e8	<-->	e19	20.613	-.125
e8	<-->	e13	6.721	-.076
e8	<-->	e12	19.942	-.123
e7	<-->	res1	4.254	-.054
e7	<-->	e21	21.489	.120
e7	<-->	e12	7.530	-.071
e7	<-->	e11	7.697	-.071
e7	<-->	e10	7.605	.086
e7	<-->	e9	9.202	-.084
e7	<-->	e8	98.221	.297
e6	<-->	e24	8.230	-.064
e6	<-->	e23	6.603	-.056
e6	<-->	e22	13.917	.086
e6	<-->	e21	8.938	.092
e6	<-->	e20	4.985	.083
e6	<-->	e18	17.785	.107
e6	<-->	e16	6.726	-.069
e6	<-->	e14	12.762	.134
e6	<-->	e13	8.388	-.095
e6	<-->	e12	25.977	-.157
e6	<-->	e11	18.960	-.133
e6	<-->	e9	16.787	-.135
e6	<-->	e8	18.508	.153
e6	<-->	e7	92.291	.323
e5	<-->	Satisfaction	10.075	-.053
e5	<-->	Trust	4.159	.034
e5	<-->	e24	8.990	-.057
e5	<-->	e18	9.885	.069
e5	<-->	e14	37.812	-.198
e5	<-->	e13	38.224	-.175
e5	<-->	e12	21.015	-.122
e5	<-->	e9	5.540	-.067
e5	<-->	e8	4.787	.067
e5	<-->	e7	15.929	.115
e5	<-->	e6	69.197	.286

			M.I.	Par Change
e4	<-->	Expectation	4.797	-.034
e4	<-->	e17	4.143	.039
e4	<-->	e16	5.114	-.043
e4	<-->	e14	36.381	-.163
e4	<-->	e13	37.181	-.144
e4	<-->	e12	25.622	-.112
e4	<-->	e5	48.581	.172
e3	<-->	e24	8.674	.045
e3	<-->	e22	10.475	-.051
e3	<-->	e14	14.511	-.097
e3	<-->	e13	10.973	-.074
e3	<-->	e11	4.649	-.045
e3	<-->	e10	15.063	-.098
e3	<-->	e8	4.126	-.049
e3	<-->	e7	10.356	-.074
e3	<-->	e6	5.733	-.065
e3	<-->	e4	91.874	.187
e2	<-->	Expectation	20.647	.076
e2	<-->	Trust	9.073	-.046
e2	<-->	res1	5.722	.058
e2	<-->	e21	8.677	-.071
e2	<-->	e16	16.902	.085
e2	<-->	e14	7.491	-.080
e2	<-->	e13	8.645	-.075
e2	<-->	e12	5.093	-.054
e2	<-->	e10	14.468	-.109
e2	<-->	e8	11.407	-.094
e2	<-->	e7	28.053	-.139
e2	<-->	e6	7.008	-.082
e2	<-->	e3	34.236	.124
e1	<-->	Expectation	21.993	.089
e1	<-->	Trust	16.735	-.070
e1	<-->	e21	15.513	-.106
e1	<-->	e20	4.816	.071
e1	<-->	e16	5.374	.054
e1	<-->	e14	8.319	-.095
e1	<-->	e10	36.248	-.195
e1	<-->	e8	4.726	-.068
e1	<-->	e7	24.326	-.146
e1	<-->	e6	31.749	-.198
e1	<-->	e3	19.573	.106
e1	<-->	e2	117.960	.297

Appendix B-3.2 Measurement CFA model of P-PE of credence products for consumers' product perspective (the modified model)

Appendix B-3.2.1 Modification indices

Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e25	<-->	Satisfaction	4.489	.022
e25	<-->	Expectation	7.070	-.031
e25	<-->	res1	5.626	.039
e24	<-->	Satisfaction	11.514	.036
e24	<-->	Expectation	5.672	-.028
e24	<-->	Trust	4.503	-.023
e24	<-->	res1	4.283	.035
e24	<-->	e25	30.009	.064
e23	<-->	e24	19.423	.053
e22	<-->	e24	4.028	-.025
e21	<-->	Satisfaction	14.348	-.057
e21	<-->	Expectation	8.403	.048
e21	<-->	Trust	4.147	.031
e21	<-->	e25	9.472	-.051
e21	<-->	e24	38.519	-.105
e21	<-->	e22	19.263	.077
e20	<-->	Satisfaction	19.859	-.081
e20	<-->	Expectation	22.378	.094
e20	<-->	e25	7.608	-.055
e20	<-->	e24	18.281	-.088
e20	<-->	e23	9.606	-.063
e20	<-->	e22	7.622	.059
e20	<-->	e21	42.410	.185
e19	<-->	Satisfaction	29.470	.082
e19	<-->	Expectation	12.230	-.057
e19	<-->	e25	12.042	.058
e19	<-->	e24	10.045	.054
e19	<-->	e21	7.099	-.063
e18	<-->	e25	20.452	-.062
e18	<-->	e22	13.605	.054
e18	<-->	e20	20.822	.107
e17	<-->	e23	6.285	.037
e17	<-->	e18	4.024	.033
e16	<-->	Satisfaction	4.612	-.028
e16	<-->	e23	4.868	-.032
e16	<-->	e20	6.435	.063
e16	<-->	e18	4.880	.036
e16	<-->	e17	6.517	-.044

			M.I.	Par Change
e15	<-->	e24	14.548	-.051
e15	<-->	e21	4.155	.038
e15	<-->	e19	5.311	-.042
e15	<-->	e18	9.261	-.046
e15	<-->	e16	11.445	.053
e14	<-->	Trust	4.986	-.043
e14	<-->	e25	8.583	-.062
e14	<-->	e20	7.177	.097
e12	<-->	Satisfaction	4.353	.033
e12	<-->	e15	12.257	.068
e12	<-->	e14	80.458	.283
e11	<-->	e19	6.341	-.060
e11	<-->	e16	8.114	.059
e11	<-->	e15	4.200	.038
e11	<-->	e12	24.607	.124
e10	<-->	e24	4.384	-.043
e10	<-->	e22	5.682	.051
e10	<-->	e21	11.971	.099
e10	<-->	e17	8.290	-.071
e10	<-->	e12	11.973	.104
e10	<-->	e11	40.300	.183
e9	<-->	Satisfaction	7.572	.045
e9	<-->	e24	4.180	.038
e9	<-->	e12	8.357	.078
e9	<-->	e11	6.152	.064
e9	<-->	e10	36.069	.186
e8	<-->	e24	10.915	-.065
e8	<-->	e21	6.224	.068
e8	<-->	e19	19.381	-.120
e8	<-->	e12	11.876	-.098
e7	<-->	Expectation	4.063	-.036
e7	<-->	res1	4.904	-.057
e7	<-->	e21	21.788	.120
e7	<-->	e11	6.624	-.067
e7	<-->	e10	7.861	.087
e7	<-->	e9	9.021	-.084
e7	<-->	e8	93.657	.286
e6	<-->	e24	7.681	-.061
e6	<-->	e23	6.288	-.055
e6	<-->	e22	13.382	.083
e6	<-->	e21	8.953	.091
e6	<-->	e20	5.363	.085
e6	<-->	e18	17.047	.104
e6	<-->	e16	8.026	-.075
e6	<-->	e14	19.225	.170
e6	<-->	e12	17.426	-.133
e6	<-->	e11	18.923	-.133
e6	<-->	e9	17.900	-.139
e6	<-->	e8	14.998	.136
e6	<-->	e7	87.185	.309

			M.I.	Par Change
e5	<-->	Satisfaction	12.296	-.058
e5	<-->	Trust	7.185	.044
e5	<-->	e24	8.756	-.055
e5	<-->	e18	9.180	.065
e5	<-->	e14	28.741	-.176
e5	<-->	e12	16.573	-.110
e5	<-->	e11	4.682	-.056
e5	<-->	e9	8.180	-.080
e5	<-->	e7	9.879	.088
e5	<-->	e6	60.148	.258
e4	<-->	Expectation	8.006	-.043
e4	<-->	Trust	5.087	.031
e4	<-->	e16	7.110	-.050
e4	<-->	e14	26.032	-.139
e4	<-->	e12	19.579	-.100
e4	<-->	e11	5.294	-.050
e4	<-->	e10	5.381	-.060
e4	<-->	e5	34.637	.138
e3	<-->	e24	10.524	.048
e3	<-->	e22	12.467	-.055
e3	<-->	e21	4.432	-.043
e3	<-->	e14	5.524	-.062
e3	<-->	e11	4.628	-.045
e3	<-->	e10	16.982	-.103
e3	<-->	e8	8.500	-.069
e3	<-->	e7	16.906	-.092
e3	<-->	e6	11.042	-.088
e3	<-->	e4	76.419	.163
e2	<-->	Expectation	19.333	.073
e2	<-->	Trust	8.338	-.044
e2	<-->	res1	5.394	.055
e2	<-->	e21	9.180	-.072
e2	<-->	e16	15.823	.082
e2	<-->	e10	15.362	-.112
e2	<-->	e8	16.015	-.109
e2	<-->	e7	35.239	-.153
e2	<-->	e6	10.711	-.100
e2	<-->	e3	28.345	.110
e1	<-->	Expectation	21.531	.088
e1	<-->	Trust	17.078	-.071
e1	<-->	e21	15.704	-.107
e1	<-->	e20	5.124	.074
e1	<-->	e16	4.777	.051
e1	<-->	e10	35.313	-.194
e1	<-->	e8	6.101	-.077
e1	<-->	e7	27.147	-.153
e1	<-->	e6	36.274	-.209
e1	<-->	e5	6.471	-.075
e1	<-->	e3	17.348	.098
e1	<-->	e2	116.177	.292

Appendix B-3.2.2 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	325
Number of distinct parameters to be estimated:	62
Degrees of freedom (325 - 62):	263

Result (Default model)

Minimum was achieved

Chi-square = 1169.466
Degrees of freedom = 263
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	62	1169.466	263	.000	4.447
Saturated model	325	.000	0		
Independence model	25	10299.097	300	.000	34.330

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.062	.833	.794	.674
Saturated model	.000	1.000		
Independence model	.564	.137	.065	.126

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.886	.870	.910	.897	.909
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.877	.777	.797
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.083	.078	.088	.000
Independence model	.257	.253	.262	.000

Appendix B-3.2.3 Factor loading parameter estimate

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
TP1	<---	Trust	1.000				
TP2	<---	Trust	1.043	.056	18.772	***	
TP3	<---	Trust	1.206	.080	15.132	***	
TP4	<---	Trust	1.124	.077	14.513	***	
TP5	<---	Trust	1.179	.085	13.853	***	
TP6	<---	Trust	1.240	.094	13.149	***	
TP7	<---	Trust	1.310	.090	14.528	***	
TP8	<---	Trust	1.211	.089	13.679	***	
TP9	<---	Trust	1.045	.077	13.549	***	
TP10	<---	Trust	1.045	.082	12.817	***	
TP11	<---	Trust	1.012	.073	13.800	***	
TP12	<---	Trust	1.077	.078	13.820	***	
TP14	<---	Trust	1.086	.087	12.500	***	
EP1	<---	Expectation	1.000				
EP2	<---	Expectation	1.090	.047	23.391	***	
EP3	<---	Expectation	1.067	.046	23.017	***	
EP4	<---	Expectation	1.113	.046	24.277	***	
EP5	<---	Expectation	.990	.050	19.939	***	
SP1	<---	Satisfaction	1.000				
SP2	<---	Satisfaction	1.037	.062	16.681	***	
SP3	<---	Satisfaction	1.254	.078	16.183	***	
SP4	<---	Satisfaction	1.258	.077	16.404	***	
SP5	<---	Satisfaction	1.214	.075	16.281	***	
SP6	<---	Satisfaction	1.256	.076	16.453	***	
RP8	<---	Trust	.129	.096	1.344	.179	
RP8	<---	Satisfaction	.665	.101	6.575	***	
RP8	<---	Expectation	.349	.091	3.812	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
TP1	<---	Trust	.643
TP2	<---	Trust	.708
TP3	<---	Trust	.799
TP4	<---	Trust	.758
TP5	<---	Trust	.714
TP6	<---	Trust	.671
TP7	<---	Trust	.757
TP8	<---	Trust	.703
TP9	<---	Trust	.694
TP10	<---	Trust	.649
TP11	<---	Trust	.710
TP12	<---	Trust	.712
TP14	<---	Trust	.631
EP1	<---	Expectation	.843
EP2	<---	Expectation	.840
EP3	<---	Expectation	.831

			Estimate
EP4	<---	Expectation	.859
EP5	<---	Expectation	.757
SP1	<---	Satisfaction	.634
SP2	<---	Satisfaction	.719
SP3	<---	Satisfaction	.873
SP4	<---	Satisfaction	.890
SP5	<---	Satisfaction	.881
SP6	<---	Satisfaction	.894
RP8	<---	Trust	.083
RP8	<---	Satisfaction	.446
RP8	<---	Expectation	.265

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Trust	<-->	Expectation	.442	.043	10.306	***	
Trust	<-->	Satisfaction	.377	.041	9.169	***	
Expectation	<-->	Satisfaction	.473	.045	10.405	***	
e1	<-->	e2	.274	.032	8.639	***	
e7	<-->	e8	.256	.033	7.699	***	
e3	<-->	e4	.172	.024	7.160	***	
e12	<-->	e14	.259	.035	7.358	***	
e6	<-->	e7	.240	.032	7.463	***	
e5	<-->	e6	.251	.036	6.957	***	
e20	<-->	e21	.193	.031	6.156	***	

Correlations: (Group number 1 - Default model)

			Estimate
Trust	<-->	Expectation	.787
Trust	<-->	Satisfaction	.761
Expectation	<-->	Satisfaction	.808
e1	<-->	e2	.466
e7	<-->	e8	.390
e3	<-->	e4	.414
e12	<-->	e14	.385
e6	<-->	e7	.327
e5	<-->	e6	.333
e20	<-->	e21	.305

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Trust	.474	.061	7.824	***	
Expectation	.665	.058	11.514	***	
Satisfaction	.516	.066	7.773	***	
e1	.672	.045	14.877	***	
e2	.514	.035	14.495	***	
e3	.391	.029	13.393	***	
e4	.444	.032	13.905	***	
e5	.635	.044	14.459	***	
e6	.892	.059	15.032	***	

	Estimate	S.E.	C.R.	P	Label
e7	.605	.042	14.425	***	
e8	.711	.049	14.499	***	
e9	.557	.038	14.614	***	
e10	.711	.048	14.885	***	
e11	.478	.033	14.498	***	
e12	.536	.037	14.459	***	
e14	.845	.057	14.929	***	
e15	.271	.021	12.962	***	
e16	.331	.025	13.043	***	
e17	.339	.026	13.226	***	
e18	.293	.023	12.538	***	
e19	.485	.034	14.287	***	
e20	.770	.050	15.251	***	
e21	.519	.035	14.910	***	
e22	.253	.019	13.013	***	
e23	.214	.017	12.468	***	
e24	.220	.017	12.791	***	
e25	.204	.017	12.320	***	
res1	.509	.034	15.188	***	

Appendix B-3.3 Accessing the measurement model validity: confirmation factor analysis (CFA) for consumers' brand perspective

Appendix B-3.3.1 Model summary

Notes for Group (Group number 1)

The model is recursive.
Sample size = 504

Parameter summary (Group number 1)

	Weights	Covariances	Variances	Means	Intercepts	Total
Fixed	38	0	0	0	0	38
Labeled	0	0	0	0	0	0
Unlabeled	36	1	36	0	0	73
Total	74	1	36	0	0	111

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	528
Number of distinct parameters to be estimated:	73
Degrees of freedom (528 - 73):	455

Result (Default model)

Minimum was achieved
Chi-square = 1994.387
Degrees of freedom = 455
Probability level = .000

Variable counts (Group number 1)

Number of variables in your model:	70
Number of observed variables:	32
Number of unobserved variables:	38
Number of exogenous variables:	36
Number of endogenous variables:	34

Appendix B-3.3.2 Parameter estimate

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Expectation	<---	Brand_Trust	.827	.069	12.037	***	
Expectation	<---	Brand_Experience	.165	.062	2.666	.008	
Satisfaction	<---	Expectation	.483	.105	4.608	***	
Satisfaction	<---	Brand_Experience	.201	.071	2.831	.005	
Satisfaction	<---	Brand_Trust	.383	.115	3.319	***	
BEB1	<---	Brand_Experience	1.000				
BEB2	<---	Brand_Experience	1.062	.066	16.138	***	
BEB3	<---	Brand_Experience	1.231	.073	16.868	***	
BEB4	<---	Brand_Experience	1.152	.073	15.792	***	
BEB5	<---	Brand_Experience	1.267	.072	17.485	***	
BEB6	<---	Brand_Experience	1.256	.078	16.029	***	
BEB7	<---	Brand_Experience	1.324	.080	16.502	***	
BEB8	<---	Brand_Experience	1.350	.074	18.217	***	
BEB9	<---	Brand_Experience	1.345	.072	18.696	***	
BEB10	<---	Brand_Experience	1.327	.074	18.004	***	
BEB11	<---	Brand_Experience	1.177	.067	17.639	***	
BEB12	<---	Brand_Experience	1.220	.066	18.438	***	
BTB1	<---	Brand_Trust	1.000				
BTB2	<---	Brand_Trust	1.158	.061	19.107	***	

			Estimate	S.E.	C.R.	P	Label
BTB3	<---	Brand_Trust	1.129	.059	19.170	***	
BTB4	<---	Brand_Trust	1.224	.064	19.248	***	
BTB5	<---	Brand_Trust	1.156	.061	19.055	***	
BTB6	<---	Brand_Trust	1.138	.059	19.260	***	
BTB7	<---	Brand_Trust	1.119	.054	20.715	***	
BTB8	<---	Brand_Trust	1.159	.068	16.990	***	
EB1	<---	Expectation	1.000				
EB2	<---	Expectation	1.101	.049	22.318	***	
EB3	<---	Expectation	1.129	.053	21.234	***	
EB4	<---	Expectation	1.143	.049	23.416	***	
EB5	<---	Expectation	1.124	.053	21.202	***	
SB1	<---	Satisfaction	1.000				
SB2	<---	Satisfaction	1.017	.048	21.030	***	
SB3	<---	Satisfaction	1.057	.047	22.554	***	
SB4	<---	Satisfaction	1.055	.046	22.753	***	
SB5	<---	Satisfaction	1.091	.048	22.879	***	
SB6	<---	Satisfaction	1.144	.047	24.347	***	
RB8	<---	Expectation	.166	.151	1.098	.272	
RB8	<---	Satisfaction	.559	.087	6.418	***	
RB8	<---	Brand_Experience	.346	.100	3.471	***	
RB8	<---	Brand_Trust	.043	.161	.265	.791	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Expectation	<---	Brand_Trust	.800
Expectation	<---	Brand_Experience	.145
Satisfaction	<---	Expectation	.431
Satisfaction	<---	Brand_Experience	.157
Satisfaction	<---	Brand_Trust	.330
BEB1	<---	Brand_Experience	.722
BEB2	<---	Brand_Experience	.722
BEB3	<---	Brand_Experience	.754
BEB4	<---	Brand_Experience	.707
BEB5	<---	Brand_Experience	.780
BEB6	<---	Brand_Experience	.718
BEB7	<---	Brand_Experience	.738
BEB8	<---	Brand_Experience	.811
BEB9	<---	Brand_Experience	.832
BEB10	<---	Brand_Experience	.802
BEB11	<---	Brand_Experience	.787
BEB12	<---	Brand_Experience	.821
BTB1	<---	Brand_Trust	.762
BTB2	<---	Brand_Trust	.796
BTB3	<---	Brand_Trust	.798
BTB4	<---	Brand_Trust	.801
BTB5	<---	Brand_Trust	.794
BTB6	<---	Brand_Trust	.801
BTB7	<---	Brand_Trust	.851

			Estimate
BTB8	<---	Brand_Trust	.720
EB1	<---	Expectation	.816
EB2	<---	Expectation	.835
EB3	<---	Expectation	.807
EB4	<---	Expectation	.862
EB5	<---	Expectation	.807
SB1	<---	Satisfaction	.785
SB2	<---	Satisfaction	.828
SB3	<---	Satisfaction	.872
SB4	<---	Satisfaction	.878
SB5	<---	Satisfaction	.881
SB6	<---	Satisfaction	.921
RB8	<---	Expectation	.122
RB8	<---	Satisfaction	.460
RB8	<---	Brand_Experience	.223
RB8	<---	Brand_Trust	.030

Appendix B-3.3.3 Explained variance and residual variances

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Expectation	.859
Satisfaction	.782
RB8	.623
SB6	.848
SB5	.776
SB4	.770
SB3	.761
SB2	.686
SB1	.616
EB5	.651
EB4	.743
EB3	.652
EB2	.698
EB1	.667
BTB8	.519
BTB7	.723
BTB6	.642
BTB5	.631
BTB4	.641
BTB3	.637
BTB2	.633
BTB1	.581
BEB12	.673
BEB11	.619
BEB10	.644
BEB9	.691

	Estimate
BEB8	.658
BEB7	.545
BEB6	.515
BEB5	.608
BEB4	.500
BEB3	.568
BEB2	.522
BEB1	.522

Appendix B-3.3.4 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	528
Number of distinct parameters to be estimated:	73
Degrees of freedom (528 - 73):	455

Result (Default model)

Minimum was achieved
Chi-square = 1994.387
Degrees of freedom = 455
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	73	1994.387	455	.000	4.383
Saturated model	528	.000	0		
Independence model	32	15287.593	496	.000	30.822

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.052	.771	.735	.665
Saturated model	.000	1.000		
Independence model	.634	.089	.030	.084

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.870	.858	.896	.887	.896
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.917	.798	.822
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.082	.078	.086	.000
Independence model	.243	.240	.247	.000

Appendix B-3.3.5 Modification indices

Regression Weights: (Group number 1 - Default model)

			M.I.	Par Change
RB8	<---	BEB11	4.159	.059
SB6	<---	RB8	7.568	.056
SB6	<---	SB5	5.221	.045
SB5	<---	SB2	4.828	-.051
SB5	<---	BTB8	6.025	-.050
SB5	<---	BTB4	5.396	-.050
SB5	<---	BEB7	6.624	-.052
SB5	<---	BEB6	6.343	-.052
SB3	<---	BTB8	10.836	.067
SB3	<---	BEB10	4.786	.048
SB2	<---	SB1	13.972	.094
SB2	<---	EB2	5.455	.064
SB2	<---	BTB8	4.688	.050
SB2	<---	BTB4	4.461	.051
SB2	<---	BEB11	4.794	.060
SB2	<---	BEB6	5.074	.053
SB1	<---	SB2	11.125	.099
EB5	<---	RB8	4.154	.058
EB5	<---	SB6	5.185	.064
EB5	<---	SB5	4.945	.062
EB5	<---	SB1	7.516	.075
EB5	<---	BTB1	4.016	.061
EB5	<---	BEB6	5.066	-.057
EB4	<---	BTB4	5.997	.054
EB2	<---	SB6	4.438	-.052
EB2	<---	SB4	7.119	-.069
EB2	<---	BEB7	4.661	.048
EB2	<---	BEB6	7.100	.060
EB2	<---	BEB5	11.426	.082
EB2	<---	BEB4	5.062	.055
EB2	<---	BEB3	6.841	.063
EB1	<---	RB8	4.343	-.051

			M.I.	Par Change
EB1	<---	BTB1	5.613	.063
EB1	<---	BEB4	7.390	-.064
EB1	<---	BEB1	4.704	-.060
BTB8	<---	SB3	9.116	.110
BTB8	<---	SB2	4.053	.072
BTB8	<---	BTB2	10.378	-.113
BTB8	<---	BTB1	8.910	-.116
BTB8	<---	BEB3	4.362	-.072
BTB7	<---	BEB12	4.225	.050
BTB7	<---	BEB6	5.405	-.048
BTB7	<---	BEB5	8.784	-.066
BTB7	<---	BEB4	8.712	-.066
BTB6	<---	BTB8	4.697	.053
BTB6	<---	BTB1	5.286	-.069
BTB6	<---	BEB7	8.773	.072
BTB6	<---	BEB6	17.603	.105
BTB6	<---	BEB5	6.018	.066
BTB6	<---	BEB4	7.275	.072
BTB5	<---	BTB1	4.719	-.068
BTB5	<---	BEB4	4.197	-.057
BTB4	<---	BEB2	4.761	-.070
BTB3	<---	BEB7	5.746	-.058
BTB3	<---	BEB5	4.415	-.057
BTB2	<---	BTB8	14.074	-.096
BTB2	<---	BTB1	12.252	.109
BTB2	<---	BEB3	6.021	.068
BTB2	<---	BEB2	6.774	.080
BTB2	<---	BEB1	4.298	.068
BTB1	<---	EB5	5.193	.062
BTB1	<---	EB1	5.866	.075
BTB1	<---	BTB8	10.387	-.078
BTB1	<---	BTB6	4.423	-.058
BTB1	<---	BTB5	4.092	-.054
BTB1	<---	BTB2	10.531	.087
BTB1	<---	BEB7	5.132	.055
BEB12	<---	Brand_Trust	4.300	.077
BEB12	<---	SB6	6.651	.065
BEB12	<---	EB1	7.809	.080
BEB12	<---	BTB7	17.107	.114
BEB12	<---	BTB4	7.402	.064
BEB12	<---	BEB11	27.501	.140
BEB12	<---	BEB6	6.243	-.057
BEB12	<---	BEB5	7.939	-.069
BEB12	<---	BEB4	12.054	-.085
BEB12	<---	BEB3	11.277	-.082
BEB11	<---	Satisfaction	10.051	.109
BEB11	<---	RB8	14.312	.104
BEB11	<---	SB6	5.495	.063
BEB11	<---	SB5	11.125	.090
BEB11	<---	SB4	10.155	.089

			M.I.	Par Change
BEB11	<---	SB3	7.871	.078
BEB11	<---	SB2	13.139	.099
BEB11	<---	SB1	8.480	.077
BEB11	<---	EB3	4.372	.056
BEB11	<---	BTB8	7.741	.067
BEB11	<---	BTB7	8.629	.087
BEB11	<---	BTB3	4.522	.058
BEB11	<---	BEB12	23.046	.138
BEB11	<---	BEB10	5.136	.059
BEB11	<---	BEB7	11.602	-.081
BEB11	<---	BEB6	12.643	-.087
BEB11	<---	BEB5	9.079	-.079
BEB11	<---	BEB4	10.568	-.085
BEB11	<---	BEB3	13.301	-.096
BEB10	<---	EB5	5.138	-.066
BEB10	<---	EB1	4.310	-.068
BEB10	<---	BEB11	5.543	.072
BEB9	<---	BEB10	4.306	.053
BEB9	<---	BEB8	15.417	.100
BEB9	<---	BEB6	5.432	-.056
BEB9	<---	BEB4	11.983	-.090
BEB9	<---	BEB3	5.103	-.059
BEB8	<---	BEB9	13.691	.104
BEB8	<---	BEB5	5.634	-.066
BEB8	<---	BEB4	18.370	-.120
BEB8	<---	BEB3	5.462	-.065
BEB7	<---	Satisfaction	7.432	-.121
BEB7	<---	RB8	6.211	-.089
BEB7	<---	SB6	6.102	-.087
BEB7	<---	SB5	13.974	-.131
BEB7	<---	SB4	8.620	-.106
BEB7	<---	SB3	4.175	-.073
BEB7	<---	SB2	6.341	-.089
BEB7	<---	EB3	4.461	-.074
BEB7	<---	BTB8	7.634	-.087
BEB7	<---	BTB3	6.775	-.093
BEB7	<---	BEB11	9.512	-.115
BEB7	<---	BEB6	19.525	.140
BEB7	<---	BEB5	11.799	.117
BEB7	<---	BEB4	9.075	.103
BEB7	<---	BEB3	6.137	.084
BEB7	<---	BEB2	5.958	-.092
BEB7	<---	BEB1	6.252	-.100
BEB6	<---	Satisfaction	4.273	-.092
BEB6	<---	RB8	8.089	-.102
BEB6	<---	SB6	6.029	-.086
BEB6	<---	SB5	9.581	-.109
BEB6	<---	EB5	8.494	-.102
BEB6	<---	EB3	7.524	-.096
BEB6	<---	BTB7	5.928	-.094

			M.I.	Par Change
BEB6	<---	BTB2	6.593	-.089
BEB6	<---	BEB12	4.001	-.075
BEB6	<---	BEB11	9.668	-.116
BEB6	<---	BEB7	18.213	.132
BEB6	<---	BEB5	22.218	.162
BEB6	<---	BEB4	28.860	.184
BEB6	<---	BEB3	11.533	.116
BEB6	<---	BEB1	6.816	-.105
BEB5	<---	EB2	5.102	.071
BEB5	<---	BTB7	8.523	-.095
BEB5	<---	BTB4	4.729	-.061
BEB5	<---	BTB3	5.030	-.068
BEB5	<---	BEB12	6.456	-.080
BEB5	<---	BEB11	8.810	-.093
BEB5	<---	BEB8	4.830	-.062
BEB5	<---	BEB7	13.966	.098
BEB5	<---	BEB6	28.193	.143
BEB5	<---	BEB4	32.129	.164
BEB5	<---	BEB3	21.249	.133
BEB4	<---	EB1	4.614	-.081
BEB4	<---	BTB7	6.167	-.090
BEB4	<---	BTB5	4.478	-.069
BEB4	<---	BEB12	7.478	-.097
BEB4	<---	BEB11	7.824	-.098
BEB4	<---	BEB9	6.959	-.086
BEB4	<---	BEB8	12.013	-.109
BEB4	<---	BEB7	8.194	.084
BEB4	<---	BEB6	27.937	.159
BEB4	<---	BEB5	24.510	.160
BEB4	<---	BEB3	47.101	.221
BEB3	<---	BTB8	7.057	-.074
BEB3	<---	BEB12	8.215	-.095
BEB3	<---	BEB11	11.562	-.112
BEB3	<---	BEB8	4.195	-.061
BEB3	<---	BEB7	6.507	.070
BEB3	<---	BEB6	13.109	.102
BEB3	<---	BEB5	19.035	.133
BEB3	<---	BEB4	55.309	.226
BEB2	<---	SB5	6.433	.075
BEB2	<---	SB1	5.176	.065
BEB2	<---	BTB3	4.008	.060
BEB2	<---	BEB7	5.645	-.062
BEB2	<---	BEB1	33.449	.194
BEB1	<---	SB5	6.036	.068
BEB1	<---	SB1	7.459	.074
BEB1	<---	BEB7	5.925	-.059
BEB1	<---	BEB6	6.924	-.066
BEB1	<---	BEB2	33.458	.172

Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e31	<-->	res1	23.558	.068
e30	<-->	e31	25.953	.058
e29	<-->	e30	13.790	.048
e28	<-->	e31	5.208	-.026
e28	<-->	e30	9.300	-.041
e28	<-->	e29	4.623	.028
e27	<-->	res3	6.555	-.033
e27	<-->	res1	11.998	-.063
e27	<-->	e31	6.593	-.034
e27	<-->	e30	16.626	-.062
e27	<-->	e29	4.092	-.030
e27	<-->	e28	13.234	.055
e26	<-->	e30	4.131	-.035
e26	<-->	e29	5.999	-.041
e26	<-->	e27	38.679	.122
e25	<-->	res3	20.447	.063
e25	<-->	res1	5.067	.044
e25	<-->	e26	5.315	.049
e24	<-->	e26	7.319	-.048
e24	<-->	e25	5.122	-.038
e22	<-->	res3	14.363	-.047
e22	<-->	res1	4.827	-.039
e22	<-->	e31	5.950	-.031
e22	<-->	e29	10.691	-.047
e22	<-->	e27	8.107	.048
e22	<-->	e26	4.930	.042
e21	<-->	res1	6.803	-.044
e21	<-->	e30	4.703	-.031
e20	<-->	res3	6.660	.046
e20	<-->	e30	7.474	-.057
e20	<-->	e28	19.249	.092
e20	<-->	e24	7.393	.059
e19	<-->	e29	6.465	.034
e19	<-->	e26	4.819	-.038
e19	<-->	e21	13.829	.053
e18	<-->	Brand_Trust	5.682	-.032
e18	<-->	Brand_Experience	7.841	.034
e18	<-->	res2	4.214	-.024
e18	<-->	res3	7.248	-.037
e18	<-->	e22	9.626	.055
e18	<-->	e20	10.248	.081
e18	<-->	e19	9.807	.051
e17	<-->	e23	6.381	-.052
e17	<-->	e20	8.053	.074
e17	<-->	e18	5.621	.048
e16	<-->	e30	8.266	-.050
e16	<-->	e28	4.575	-.038
e16	<-->	e27	4.206	.041
e16	<-->	e24	17.376	.075

			M.I.	Par Change
e16	<-->	e17	9.317	.067
e15	<-->	Brand_Experience	4.151	-.025
e15	<-->	e30	6.342	.041
e15	<-->	e16	6.942	.056
e14	<-->	Brand_Trust	5.951	-.034
e14	<-->	Brand_Experience	8.211	.036
e14	<-->	e23	5.432	.048
e14	<-->	e20	30.713	-.145
e14	<-->	e18	8.929	-.060
e13	<-->	e28	8.247	-.046
e13	<-->	e25	10.551	.064
e13	<-->	e21	12.901	.061
e13	<-->	e20	22.691	-.119
e13	<-->	e18	13.422	-.071
e13	<-->	e17	11.987	-.070
e13	<-->	e14	31.121	.112
e12	<-->	Brand_Trust	20.204	.055
e12	<-->	Brand_Experience	14.556	-.042
e12	<-->	e31	11.791	.044
e12	<-->	e28	5.427	-.035
e12	<-->	e26	9.000	-.057
e12	<-->	e21	6.193	.039
e12	<-->	e19	24.112	.073
e11	<-->	Brand_Trust	18.161	.056
e11	<-->	Brand_Experience	13.103	-.043
e11	<-->	res3	17.074	.056
e11	<-->	res1	11.782	.065
e11	<-->	e20	4.313	.052
e11	<-->	e19	7.077	.043
e11	<-->	e12	77.300	.154
e10	<-->	Brand_Trust	4.028	-.028
e10	<-->	res2	4.969	-.028
e10	<-->	e31	5.751	-.036
e10	<-->	e28	9.810	.054
e10	<-->	e25	4.582	-.045
e10	<-->	e20	7.060	.071
e10	<-->	e12	4.893	.042
e10	<-->	e11	15.597	.080
e9	<-->	e10	13.037	.072
e8	<-->	Brand_Trust	4.311	.029
e8	<-->	e29	5.449	-.039
e8	<-->	e19	5.712	.041
e8	<-->	e10	5.939	.052
e8	<-->	e9	48.923	.138
e7	<-->	Brand_Trust	9.285	-.052
e7	<-->	Brand_Experience	6.708	.040
e7	<-->	res3	17.575	-.074
e7	<-->	e30	10.036	-.065
e7	<-->	e23	4.040	-.051
e7	<-->	e22	5.789	.054

			M.I.	Par Change
e7	<-->	e20	6.931	-.085
e7	<-->	e18	9.582	.077
e7	<-->	e15	6.871	-.066
e7	<-->	e13	8.528	.072
e7	<-->	e12	8.523	-.066
e7	<-->	e11	26.836	-.127
e7	<-->	e10	5.626	-.062
e7	<-->	e8	6.608	.067
e6	<-->	Brand_Trust	8.935	-.051
e6	<-->	Brand_Experience	6.458	.039
e6	<-->	res2	5.310	-.035
e6	<-->	res3	4.451	-.037
e6	<-->	res1	7.638	-.069
e6	<-->	e30	8.991	-.062
e6	<-->	e25	7.642	-.070
e6	<-->	e23	6.055	-.063
e6	<-->	e22	9.560	.070
e6	<-->	e19	6.924	-.055
e6	<-->	e18	23.463	.121
e6	<-->	e14	6.696	-.067
e6	<-->	e12	13.461	-.084
e6	<-->	e11	27.292	-.128
e6	<-->	e9	11.706	-.083
e6	<-->	e7	42.197	.207
e5	<-->	Brand_Trust	6.554	-.037
e5	<-->	Brand_Experience	4.729	.028
e5	<-->	res2	8.870	.038
e5	<-->	e26	4.252	.047
e5	<-->	e22	21.052	.088
e5	<-->	e19	15.573	-.070
e5	<-->	e18	5.935	.052
e5	<-->	e16	4.790	-.050
e5	<-->	e15	5.277	-.049
e5	<-->	e12	21.662	-.089
e5	<-->	e11	24.819	-.103
e5	<-->	e9	5.293	-.047
e5	<-->	e8	15.382	-.086
e5	<-->	e7	32.310	.153
e5	<-->	e6	60.873	.210
e4	<-->	e22	6.016	.052
e4	<-->	e21	10.527	-.067
e4	<-->	e20	4.187	.062
e4	<-->	e19	12.306	-.069
e4	<-->	e18	6.833	.062
e4	<-->	e17	5.849	-.059
e4	<-->	e12	25.167	-.108
e4	<-->	e11	22.090	-.109
e4	<-->	e10	6.313	-.062
e4	<-->	e9	25.006	-.114
e4	<-->	e8	38.366	-.152

			M.I.	Par Change
e4	<-->	e7	18.988	.131
e4	<-->	e6	60.409	.234
e4	<-->	e5	67.169	.208
e3	<-->	e22	10.079	.064
e3	<-->	e20	9.836	-.090
e3	<-->	e19	4.620	-.040
e3	<-->	e17	4.428	-.049
e3	<-->	e14	5.404	.053
e3	<-->	e12	27.601	-.106
e3	<-->	e11	32.605	-.124
e3	<-->	e10	4.846	-.051
e3	<-->	e9	12.483	-.076
e3	<-->	e8	13.376	-.084
e3	<-->	e7	15.064	.110
e3	<-->	e6	28.324	.151
e3	<-->	e5	52.100	.172
e3	<-->	e4	115.700	.287
e2	<-->	res3	6.396	.037
e2	<-->	e30	9.268	.053
e2	<-->	e26	4.033	.045
e2	<-->	e22	9.697	-.059
e2	<-->	e18	4.974	-.047
e2	<-->	e16	7.069	-.060
e2	<-->	e15	7.521	.057
e2	<-->	e14	6.141	.054
e2	<-->	e8	4.755	-.047
e2	<-->	e7	13.077	-.096
e2	<-->	e3	4.972	.053
e1	<-->	res3	6.473	.035
e1	<-->	e30	6.328	.041
e1	<-->	e26	6.469	.053
e1	<-->	e22	5.969	-.044
e1	<-->	e21	6.216	-.043
e1	<-->	e11	6.348	.049
e1	<-->	e8	5.720	-.049
e1	<-->	e7	13.726	-.093
e1	<-->	e6	14.969	-.097
e1	<-->	e5	5.163	-.048
e1	<-->	e2	73.455	.180

Appendix B-3.4 Measurement CFA model of P-PE of credence products for consumers' brand perspective (the modified model)

Appendix B-3.4.1 Modification indices

Covariances: (Group number 1 - Default model)

			M.I.	Par Change
e31	<-->	res1	22.878	.067
e30	<-->	e31	25.740	.058
e29	<-->	e30	13.792	.048
e28	<-->	e31	5.337	-.026
e28	<-->	e30	9.306	-.041
e28	<-->	e29	4.638	.028
e27	<-->	res3	6.250	-.032
e27	<-->	res1	11.542	-.062
e27	<-->	e31	6.568	-.034
e27	<-->	e30	16.445	-.061
e27	<-->	e28	13.376	.056
e26	<-->	e30	4.092	-.035
e26	<-->	e29	5.936	-.041
e26	<-->	e27	38.882	.122
e25	<-->	res3	19.773	.062
e25	<-->	res1	4.762	.043
e25	<-->	e26	5.314	.049
e24	<-->	e26	7.243	-.048
e24	<-->	e25	5.228	-.038
e22	<-->	res3	13.700	-.046
e22	<-->	res1	4.508	-.037
e22	<-->	e31	5.931	-.031
e22	<-->	e29	10.503	-.047
e22	<-->	e27	8.264	.048
e22	<-->	e26	5.025	.042
e21	<-->	res1	7.149	-.046
e21	<-->	e30	4.741	-.031
e20	<-->	res3	6.495	.046
e20	<-->	e30	7.500	-.057
e20	<-->	e28	19.126	.092
e20	<-->	e24	7.366	.059
e19	<-->	e29	6.501	.034
e19	<-->	e26	4.746	-.038
e19	<-->	e21	13.677	.053
e18	<-->	Brand_Trust	5.456	-.032
e18	<-->	Brand_Experience	7.692	.034
e18	<-->	res3	6.680	-.036
e18	<-->	e22	9.797	.056
e18	<-->	e20	10.238	.081
e18	<-->	e19	9.931	.051

			M.I.	Par Change
e17	<-->	e23	6.399	-.052
e17	<-->	e20	7.900	.074
e17	<-->	e18	5.547	.048
e16	<-->	e30	8.273	-.050
e16	<-->	e28	4.647	-.038
e16	<-->	e27	4.263	.041
e16	<-->	e24	17.376	.075
e16	<-->	e17	9.149	.066
e15	<-->	Brand_Experience	4.503	-.026
e15	<-->	e30	6.331	.041
e15	<-->	e16	6.967	.056
e14	<-->	Brand_Trust	4.923	-.031
e14	<-->	Brand_Experience	6.940	.034
e14	<-->	e23	5.560	.049
e14	<-->	e20	30.610	-.145
e14	<-->	e18	8.711	-.060
e13	<-->	e28	8.316	-.046
e13	<-->	e25	10.418	.063
e13	<-->	e21	12.763	.061
e13	<-->	e20	22.901	-.120
e13	<-->	e18	13.433	-.071
e13	<-->	e17	12.289	-.070
e13	<-->	e14	31.163	.112
e12	<-->	Brand_Trust	27.863	.067
e12	<-->	Brand_Experience	20.008	-.051
e12	<-->	e31	10.729	.043
e12	<-->	e28	5.527	-.036
e12	<-->	e26	7.594	-.054
e12	<-->	e21	5.104	.036
e12	<-->	e19	24.532	.076
e10	<-->	e31	6.181	-.037
e10	<-->	e28	9.594	.054
e10	<-->	e25	4.826	-.047
e10	<-->	e21	4.066	-.037
e10	<-->	e20	7.012	.071
e10	<-->	e12	7.608	.054
e9	<-->	e10	11.085	.066
e8	<-->	e29	5.076	-.037
e8	<-->	e19	6.185	.042
e8	<-->	e10	4.422	.045
e8	<-->	e9	39.043	.120
e7	<-->	Brand_Trust	9.866	-.054
e7	<-->	Brand_Experience	7.107	.042
e7	<-->	res3	15.064	-.068
e7	<-->	e30	9.586	-.064
e7	<-->	e22	6.247	.056
e7	<-->	e20	7.357	-.087
e7	<-->	e18	9.688	.077
e7	<-->	e15	6.923	-.066
e7	<-->	e13	8.028	.070

			M.I.	Par Change
e7	<-->	e12	8.286	-.067
e7	<-->	e10	6.832	-.069
e6	<-->	Brand_Trust	7.882	-.049
e6	<-->	Brand_Experience	5.682	.038
e6	<-->	res2	4.403	-.032
e6	<-->	res1	6.825	-.065
e6	<-->	e30	8.405	-.060
e6	<-->	e27	4.454	.050
e6	<-->	e25	7.985	-.072
e6	<-->	e23	5.420	-.059
e6	<-->	e22	10.131	.072
e6	<-->	e19	6.737	-.054
e6	<-->	e18	23.753	.122
e6	<-->	e14	6.254	-.065
e6	<-->	e12	11.441	-.079
e6	<-->	e9	16.887	-.098
e6	<-->	e7	40.315	.202
e5	<-->	Brand_Trust	4.067	-.030
e5	<-->	res2	11.052	.043
e5	<-->	e26	5.042	.051
e5	<-->	e22	21.942	.091
e5	<-->	e19	14.916	-.069
e5	<-->	e18	6.050	.053
e5	<-->	e16	4.854	-.051
e5	<-->	e15	4.980	-.048
e5	<-->	e12	16.036	-.080
e5	<-->	e9	7.458	-.056
e5	<-->	e8	19.315	-.096
e5	<-->	e7	31.562	.152
e5	<-->	e6	62.321	.215
e4	<-->	e22	6.440	.055
e4	<-->	e21	10.953	-.070
e4	<-->	e20	4.176	.063
e4	<-->	e19	11.199	-.067
e4	<-->	e18	7.066	.064
e4	<-->	e17	6.184	-.062
e4	<-->	e12	15.827	-.089
e4	<-->	e9	23.952	-.113
e4	<-->	e8	37.556	-.151
e4	<-->	e7	21.075	.140
e4	<-->	e6	65.084	.248
e4	<-->	e5	75.351	.227
e2	<-->	res3	8.270	.043
e2	<-->	e30	9.873	.055
e2	<-->	e26	4.633	.048
e2	<-->	e22	9.226	-.058
e2	<-->	e18	4.911	-.047
e2	<-->	e16	7.186	-.061
e2	<-->	e15	7.774	.059
e2	<-->	e14	6.733	.057

			M.I.	Par Change
e2	<-->	e8	6.575	-.055
e2	<-->	e7	14.578	-.102
e1	<-->	Brand_Trust	4.380	.029
e1	<-->	res3	8.374	.041
e1	<-->	e30	6.783	.043
e1	<-->	e26	7.188	.057
e1	<-->	e23	4.393	.042
e1	<-->	e22	5.541	-.042
e1	<-->	e21	6.955	-.046
e1	<-->	e12	4.288	.038
e1	<-->	e8	7.269	-.055
e1	<-->	e7	14.729	-.096
e1	<-->	e6	14.485	-.097
e1	<-->	e2	76.955	.187

Appendix B-3.4.2 Model fit summary

Number of distinct sample moments: 465
Number of distinct parameters to be estimated: 75
Degrees of freedom (465 - 75): 390

Result (Default model)

Minimum was achieved
Chi-square = 1272.993
Degrees of freedom = 390
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	75	1272.993	390	.000	3.264
Saturated model	465	.000	0		
Independence model	30	14042.809	435	.000	32.282

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.042	.852	.824	.715
Saturated model	.000	1.000		
Independence model	.634	.094	.032	.088

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.909	.899	.935	.928	.935
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.897	.815	.838
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.067	.063	.071	.000
Independence model	.249	.246	.253	.000

Appendix B-3.4.3 Factor loading parameter estimate

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Expectation	<---	Brand_Trust	.837	.072	11.617	***	
Expectation	<---	Brand_Experience	.153	.068	2.263	.024	
Satisfaction	<---	Expectation	.494	.105	4.706	***	
Satisfaction	<---	Brand_Experience	.178	.077	2.310	.021	
Satisfaction	<---	Brand_Trust	.389	.119	3.277	.001	
BEB1	<---	Brand_Experience	1.000				
BEB2	<---	Brand_Experience	1.051	.054	19.616	***	
BEB4	<---	Brand_Experience	1.077	.076	14.128	***	
BEB5	<---	Brand_Experience	1.226	.076	16.122	***	
BEB6	<---	Brand_Experience	1.196	.081	14.808	***	
BEB7	<---	Brand_Experience	1.314	.084	15.661	***	
BEB8	<---	Brand_Experience	1.389	.078	17.789	***	
BEB9	<---	Brand_Experience	1.381	.076	18.195	***	
BEB10	<---	Brand_Experience	1.355	.077	17.515	***	
BEB12	<---	Brand_Experience	1.256	.070	18.054	***	
BTB1	<---	Brand_Trust	1.000				
BTB2	<---	Brand_Trust	1.157	.060	19.128	***	
BTB3	<---	Brand_Trust	1.127	.059	19.168	***	
BTB4	<---	Brand_Trust	1.224	.064	19.265	***	
BTB5	<---	Brand_Trust	1.156	.061	19.092	***	
BTB6	<---	Brand_Trust	1.135	.059	19.243	***	
BTB7	<---	Brand_Trust	1.119	.054	20.763	***	
BTB8	<---	Brand_Trust	1.158	.068	16.997	***	
EB1	<---	Expectation	1.000				

			Estimate	S.E.	C.R.	P	Label
EB2	<---	Expectation	1.099	.049	22.308	***	
EB3	<---	Expectation	1.129	.053	21.257	***	
EB4	<---	Expectation	1.142	.049	23.432	***	
EB5	<---	Expectation	1.124	.053	21.246	***	
SB1	<---	Satisfaction	1.000				
SB2	<---	Satisfaction	1.017	.048	21.006	***	
SB3	<---	Satisfaction	1.058	.047	22.537	***	
SB4	<---	Satisfaction	1.056	.046	22.737	***	
SB5	<---	Satisfaction	1.092	.048	22.867	***	
SB6	<---	Satisfaction	1.144	.047	24.340	***	
RB8	<---	Expectation	.168	.151	1.113	.266	
RB8	<---	Satisfaction	.563	.087	6.476	***	
RB8	<---	Brand_Experience	.384	.109	3.542	***	
RB8	<---	Brand_Trust	.009	.165	.052	.959	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Expectation	<---	Brand_Trust	.809
Expectation	<---	Brand_Experience	.133
Satisfaction	<---	Expectation	.441
Satisfaction	<---	Brand_Experience	.138
Satisfaction	<---	Brand_Trust	.336
BEB1	<---	Brand_Experience	.712
BEB2	<---	Brand_Experience	.704
BEB4	<---	Brand_Experience	.652
BEB5	<---	Brand_Experience	.743
BEB6	<---	Brand_Experience	.683
BEB7	<---	Brand_Experience	.721
BEB8	<---	Brand_Experience	.822
BEB9	<---	Brand_Experience	.841
BEB10	<---	Brand_Experience	.807
BEB12	<---	Brand_Experience	.832
BTB1	<---	Brand_Trust	.763
BTB2	<---	Brand_Trust	.796
BTB3	<---	Brand_Trust	.797
BTB4	<---	Brand_Trust	.801
BTB5	<---	Brand_Trust	.795
BTB6	<---	Brand_Trust	.800
BTB7	<---	Brand_Trust	.851
BTB8	<---	Brand_Trust	.720
EB1	<---	Expectation	.817
EB2	<---	Expectation	.834
EB3	<---	Expectation	.808
EB4	<---	Expectation	.862
EB5	<---	Expectation	.807
SB1	<---	Satisfaction	.784
SB2	<---	Satisfaction	.828
SB3	<---	Satisfaction	.872

			Estimate
SB4	<---	Satisfaction	.878
SB5	<---	Satisfaction	.881
SB6	<---	Satisfaction	.921
RB8	<---	Expectation	.123
RB8	<---	Satisfaction	.463
RB8	<---	Brand_Experience	.244
RB8	<---	Brand_Trust	.006

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Brand_Experience	<-->	Brand_Trust	.429	.039	10.916	***	
e1	<-->	e2	.182	.024	7.450	***	
e4	<-->	e5	.268	.033	8.177	***	
e4	<-->	e6	.265	.035	7.487	***	
e5	<-->	e6	.226	.032	7.133	***	
e6	<-->	e7	.146	.031	4.664	***	
e8	<-->	e9	.093	.022	4.252	***	

Correlations: (Group number 1 - Default model)

			Estimate
Brand_Experience	<-->	Brand_Trust	.860
e1	<-->	e2	.390
e4	<-->	e5	.433
e4	<-->	e6	.371
e5	<-->	e6	.359
e6	<-->	e7	.204
e8	<-->	e9	.245

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Brand_Experience	.446	.050	9.000	***	
Brand_Trust	.558	.056	9.991	***	
res2	.085	.012	7.142	***	
res3	.164	.018	9.057	***	
e1	.435	.030	14.704	***	
e2	.500	.034	14.749	***	
e4	.701	.047	15.011	***	
e5	.543	.038	14.488	***	
e6	.727	.048	15.018	***	
e7	.709	.048	14.667	***	
e8	.412	.031	13.295	***	
e9	.353	.027	12.964	***	
e10	.438	.032	13.804	***	
e12	.313	.023	13.376	***	
e13	.401	.027	14.742	***	
e14	.432	.030	14.467	***	
e15	.406	.028	14.453	***	
e16	.468	.032	14.420	***	
e17	.435	.030	14.479	***	

	Estimate	S.E.	C.R.	P	Label
e18	.405	.028	14.428	***	
e19	.266	.019	13.726	***	
e20	.695	.046	14.995	***	
e21	.297	.021	13.887	***	
e22	.314	.023	13.600	***	
e23	.406	.029	14.021	***	
e24	.269	.021	12.993	***	
e25	.403	.029	14.025	***	
e26	.468	.032	14.754	***	
e27	.355	.025	14.349	***	
e28	.264	.019	13.650	***	
e29	.249	.018	13.524	***	
e30	.257	.019	13.437	***	
e31	.175	.015	11.930	***	
res1	.415	.027	15.149	***	

Appendix B-4 Direct and indirect model for consumers' product perspective

Appendix B-4.1 Direct model

Appendix B-4.1.1 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	325
Number of distinct parameters to be estimated:	61
Degrees of freedom (325 - 61):	264

Result (Default model)

Minimum was achieved
Chi-square = 1256.066
Degrees of freedom = 264
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	61	1256.066	264	.000	4.758
Saturated model	325	.000	0		
Independence model	25	10299.097	300	.000	34.330

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.075	.827	.787	.671
Saturated model	.000	1.000		
Independence model	.564	.137	.065	.126

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.878	.861	.901	.887	.901
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.880	.773	.793
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.086	.082	.091	.000
Independence model	.257	.253	.262	.000

Appendix B-4.1.2 Parameter estimate

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Satisfaction	<---	Trust	.810	.070	11.510	***	
Expectation	<---	Trust	.963	.068	14.214	***	
TP1	<---	Trust	1.000				
TP2	<---	Trust	1.033	.054	19.050	***	
TP3	<---	Trust	1.173	.077	15.309	***	
TP4	<---	Trust	1.090	.075	14.622	***	
TP5	<---	Trust	1.140	.082	13.888	***	
TP6	<---	Trust	1.207	.091	13.267	***	
TP7	<---	Trust	1.279	.087	14.726	***	
TP8	<---	Trust	1.182	.086	13.825	***	
TP9	<---	Trust	1.026	.075	13.754	***	
TP10	<---	Trust	1.017	.079	12.892	***	

			Estimate	S.E.	C.R.	P	Label
TP11	<---	Trust	.993	.071	14.002	***	
TP12	<---	Trust	1.059	.075	14.056	***	
TP14	<---	Trust	1.078	.084	12.779	***	
EP1	<---	Expectation	1.000				
EP2	<---	Expectation	1.094	.046	23.656	***	
EP3	<---	Expectation	1.062	.046	22.959	***	
EP4	<---	Expectation	1.113	.046	24.430	***	
EP5	<---	Expectation	.972	.050	19.506	***	
SP1	<---	Satisfaction	1.000				
SP2	<---	Satisfaction	1.042	.063	16.491	***	
SP3	<---	Satisfaction	1.270	.080	15.892	***	
SP4	<---	Satisfaction	1.271	.079	16.072	***	
SP5	<---	Satisfaction	1.233	.077	16.022	***	
SP6	<---	Satisfaction	1.277	.079	16.193	***	
RP8	<---	Trust	.082	.133	.618	.536	
RP8	<---	Satisfaction	.696	.097	7.198	***	
RP8	<---	Expectation	.374	.086	4.345	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Satisfaction	<---	Trust	.798
Expectation	<---	Trust	.823
TP1	<---	Trust	.653
TP2	<---	Trust	.711
TP3	<---	Trust	.788
TP4	<---	Trust	.746
TP5	<---	Trust	.700
TP6	<---	Trust	.664
TP7	<---	Trust	.751
TP8	<---	Trust	.697
TP9	<---	Trust	.692
TP10	<---	Trust	.641
TP11	<---	Trust	.707
TP12	<---	Trust	.710
TP14	<---	Trust	.636
EP1	<---	Expectation	.845
EP2	<---	Expectation	.845
EP3	<---	Expectation	.829
EP4	<---	Expectation	.861
EP5	<---	Expectation	.745
SP1	<---	Satisfaction	.626
SP2	<---	Satisfaction	.714
SP3	<---	Satisfaction	.873
SP4	<---	Satisfaction	.888
SP5	<---	Satisfaction	.884
SP6	<---	Satisfaction	.898
RP8	<---	Trust	.054
RP8	<---	Satisfaction	.466
RP8	<---	Expectation	.289

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
e1	<-->	e2	.264	.031	8.536	***	
e7	<-->	e8	.268	.034	7.982	***	
e3	<-->	e4	.191	.025	7.769	***	
e12	<-->	e14	.257	.035	7.364	***	
e6	<-->	e7	.243	.032	7.550	***	
e5	<-->	e6	.266	.037	7.250	***	
e20	<-->	e21	.203	.032	6.373	***	

Correlations: (Group number 1 - Default model)

			Estimate
e1	<-->	e2	.457
e7	<-->	e8	.400
e3	<-->	e4	.440
e12	<-->	e14	.382
e6	<-->	e7	.326
e5	<-->	e6	.345
e20	<-->	e21	.316

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Trust	.488	.061	7.995	***	
res2	.216	.023	9.383	***	
res3	.183	.026	7.139	***	
e1	.658	.044	14.912	***	
e2	.509	.035	14.580	***	
e3	.409	.030	13.773	***	
e4	.463	.033	14.218	***	
e5	.660	.045	14.670	***	
e6	.904	.060	15.181	***	
e7	.618	.042	14.652	***	
e8	.724	.049	14.661	***	
e9	.561	.038	14.731	***	
e10	.723	.048	15.001	***	
e11	.483	.033	14.632	***	
e12	.538	.037	14.585	***	
e14	.837	.056	14.988	***	
e15	.267	.021	12.777	***	
e16	.322	.025	12.798	***	
e17	.343	.026	13.158	***	
e18	.288	.023	12.318	***	
e19	.505	.035	14.335	***	
e20	.783	.051	15.262	***	
e21	.527	.035	14.916	***	
e22	.253	.020	12.943	***	
e23	.219	.018	12.473	***	
e24	.215	.017	12.615	***	
e25	.198	.016	12.072	***	
res1	.508	.034	15.144	***	

Appendix B-4.2 Indirect model

Appendix B-4.2.1 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	325
Number of distinct parameters to be estimated:	60
Degrees of freedom (325 - 60):	265

Result (Default model)

Minimum was achieved
Chi-square = 1256.588
Degrees of freedom = 265
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	60	1256.588	265	.000	4.742
Saturated model	325	.000	0		
Independence model	25	10299.097	300	.000	34.330

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.075	.827	.787	.674
Saturated model	.000	1.000		
Independence model	.564	.137	.065	.126

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.878	.862	.901	.888	.901
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.883	.776	.796
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.086	.081	.091	.000
Independence model	.257	.253	.262	.000

Appendix B-4.2.2 Parameter estimate

Regression weights			Estimate	S.E.	C.R.	P	Label
Satisfaction	<---	Trust	.811	.070	11.514	***	
Expectation	<---	Trust	.964	.068	14.220	***	
TP1	<---	Trust	1.000				
TP2	<---	Trust	1.032	.054	19.042	***	
TP3	<---	Trust	1.173	.077	15.301	***	
TP4	<---	Trust	1.090	.075	14.613	***	
TP5	<---	Trust	1.140	.082	13.887	***	
TP6	<---	Trust	1.208	.091	13.268	***	
TP7	<---	Trust	1.280	.087	14.727	***	
TP8	<---	Trust	1.183	.086	13.820	***	
TP9	<---	Trust	1.026	.075	13.746	***	
TP10	<---	Trust	1.018	.079	12.892	***	
TP11	<---	Trust	.993	.071	13.996	***	
TP12	<---	Trust	1.060	.075	14.054	***	
TP14	<---	Trust	1.079	.084	12.781	***	
EP1	<---	Expectation	1.000				
EP2	<---	Expectation	1.094	.046	23.650	***	
EP3	<---	Expectation	1.062	.046	22.958	***	
EP4	<---	Expectation	1.113	.046	24.422	***	
EP5	<---	Expectation	.972	.050	19.507	***	
SP1	<---	Satisfaction	1.000				
SP2	<---	Satisfaction	1.042	.063	16.492	***	
SP3	<---	Satisfaction	1.270	.080	15.892	***	
SP4	<---	Satisfaction	1.270	.079	16.070	***	
SP5	<---	Satisfaction	1.233	.077	16.021	***	
SP6	<---	Satisfaction	1.277	.079	16.193	***	
RP8	<---	Satisfaction	.727	.078	9.349	***	
RP8	<---	Expectation	.413	.059	6.992	***	

Standardized Regression Weights:			Estimate
Satisfaction	<---	Trust	.798
Expectation	<---	Trust	.824
TP1	<---	Trust	.652
TP2	<---	Trust	.711
TP3	<---	Trust	.788
TP4	<---	Trust	.745
TP5	<---	Trust	.700
TP6	<---	Trust	.664
TP7	<---	Trust	.751
TP8	<---	Trust	.697
TP9	<---	Trust	.692
TP10	<---	Trust	.642
TP11	<---	Trust	.707
TP12	<---	Trust	.710
TP14	<---	Trust	.636
EP1	<---	Expectation	.845
EP2	<---	Expectation	.844
EP3	<---	Expectation	.829
EP4	<---	Expectation	.861
EP5	<---	Expectation	.745
SP1	<---	Satisfaction	.626
SP2	<---	Satisfaction	.714
SP3	<---	Satisfaction	.873
SP4	<---	Satisfaction	.887
SP5	<---	Satisfaction	.883
SP6	<---	Satisfaction	.898
RP8	<---	Satisfaction	.488
RP8	<---	Expectation	.319

Appendix B-5 Direct and indirect model for consumers' brand perspective

Appendix B-5.1 Direct model

Appendix B-5.1.1 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	465
Number of distinct parameters to be estimated:	75
Degrees of freedom (465-75):	390

Result (Default model)

Minimum was achieved
Chi-square = 1272.993
Degrees of freedom = 390
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	75	1272.993	390	.000	3.264
Saturated model	465	.000	0		
Independence model	30	14042.809	435	.000	32.282

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.042	.852	.824	.715
Saturated model	.000	1.000		
Independence model	.634	.094	.032	.088

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.909	.899	.935	.928	.935
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.897	.815	.838
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.067	.063	.071	.000
Independence model	.249	.246	.253	.000

Appendix B-5.1.2 Parameter estimate

Scalar Estimates (Group number 1 - Default model)

Maximum Likelihood Estimates

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Brand_Experience	<---	Brand_Trust	.769	.051	15.010	***	
Expectation	<---	Brand_Trust	.837	.072	11.617	***	
Expectation	<---	Brand_Experience	.153	.068	2.263	.024	
Satisfaction	<---	Expectation	.494	.105	4.706	***	
Satisfaction	<---	Brand_Experience	.178	.077	2.310	.021	
Satisfaction	<---	Brand_Trust	.389	.119	3.277	.001	
BEB1	<---	Brand_Experience	1.000				
BEB2	<---	Brand_Experience	1.051	.054	19.616	***	
BEB4	<---	Brand_Experience	1.077	.076	14.128	***	
BEB5	<---	Brand_Experience	1.226	.076	16.122	***	
BEB6	<---	Brand_Experience	1.196	.081	14.808	***	
BEB7	<---	Brand_Experience	1.314	.084	15.661	***	
BEB8	<---	Brand_Experience	1.389	.078	17.789	***	
BEB9	<---	Brand_Experience	1.381	.076	18.195	***	
BEB10	<---	Brand_Experience	1.355	.077	17.515	***	
BEB12	<---	Brand_Experience	1.256	.070	18.054	***	
BTB1	<---	Brand_Trust	1.000				
BTB2	<---	Brand_Trust	1.157	.060	19.128	***	
BTB3	<---	Brand_Trust	1.127	.059	19.168	***	
BTB4	<---	Brand_Trust	1.224	.064	19.265	***	
BTB5	<---	Brand_Trust	1.156	.061	19.092	***	
BTB6	<---	Brand_Trust	1.135	.059	19.243	***	
BTB7	<---	Brand_Trust	1.119	.054	20.763	***	
BTB8	<---	Brand_Trust	1.158	.068	16.997	***	
EB1	<---	Expectation	1.000				
EB2	<---	Expectation	1.099	.049	22.308	***	
EB3	<---	Expectation	1.129	.053	21.257	***	
EB4	<---	Expectation	1.142	.049	23.432	***	
EB5	<---	Expectation	1.124	.053	21.246	***	
SB1	<---	Satisfaction	1.000				
SB2	<---	Satisfaction	1.017	.048	21.006	***	
SB3	<---	Satisfaction	1.058	.047	22.537	***	
SB4	<---	Satisfaction	1.056	.046	22.737	***	

			Estimate	S.E.	C.R.	P	Label
SB5	<---	Satisfaction	1.092	.048	22.867	***	
SB6	<---	Satisfaction	1.144	.047	24.340	***	
RB8	<---	Expectation	.168	.151	1.113	.266	
RB8	<---	Satisfaction	.563	.087	6.476	***	
RB8	<---	Brand_Experience	.384	.109	3.542	***	
RB8	<---	Brand_Trust	.009	.165	.052	.959	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Brand_Experience	<---	Brand_Trust	.860
Expectation	<---	Brand_Trust	.809
Expectation	<---	Brand_Experience	.133
Satisfaction	<---	Expectation	.441
Satisfaction	<---	Brand_Experience	.138
Satisfaction	<---	Brand_Trust	.336
BEB1	<---	Brand_Experience	.712
BEB2	<---	Brand_Experience	.704
BEB4	<---	Brand_Experience	.652
BEB5	<---	Brand_Experience	.743
BEB6	<---	Brand_Experience	.683
BEB7	<---	Brand_Experience	.721
BEB8	<---	Brand_Experience	.822
BEB9	<---	Brand_Experience	.841
BEB10	<---	Brand_Experience	.807
BEB12	<---	Brand_Experience	.832
BTB1	<---	Brand_Trust	.763
BTB2	<---	Brand_Trust	.796
BTB3	<---	Brand_Trust	.797
BTB4	<---	Brand_Trust	.801
BTB5	<---	Brand_Trust	.795
BTB6	<---	Brand_Trust	.800
BTB7	<---	Brand_Trust	.851
BTB8	<---	Brand_Trust	.720
EB1	<---	Expectation	.817
EB2	<---	Expectation	.834
EB3	<---	Expectation	.808
EB4	<---	Expectation	.862
EB5	<---	Expectation	.807
SB1	<---	Satisfaction	.784
SB2	<---	Satisfaction	.828
SB3	<---	Satisfaction	.872
SB4	<---	Satisfaction	.878
SB5	<---	Satisfaction	.881
SB6	<---	Satisfaction	.921
RB8	<---	Expectation	.123
RB8	<---	Satisfaction	.463
RB8	<---	Brand_Experience	.244
RB8	<---	Brand_Trust	.006

Covariances: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
e1	<-->	e2	.182	.024	7.450	***	
e4	<-->	e5	.268	.033	8.177	***	
e4	<-->	e6	.265	.035	7.487	***	
e5	<-->	e6	.226	.032	7.133	***	
e6	<-->	e7	.146	.031	4.664	***	
e8	<-->	e9	.093	.022	4.252	***	

Correlations: (Group number 1 - Default model)

			Estimate
e1	<-->	e2	.390
e4	<-->	e5	.433
e4	<-->	e6	.371
e5	<-->	e6	.359
e6	<-->	e7	.204
e8	<-->	e9	.245

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Brand_Trust	.558	.056	9.991	***	
res4	.116	.015	7.645	***	
res2	.085	.012	7.142	***	
res3	.164	.018	9.057	***	
e1	.435	.030	14.704	***	
e2	.500	.034	14.749	***	
e4	.701	.047	15.011	***	
e5	.543	.038	14.488	***	
e6	.727	.048	15.018	***	
e7	.709	.048	14.667	***	
e8	.412	.031	13.295	***	
e9	.353	.027	12.964	***	
e10	.438	.032	13.804	***	
e12	.313	.023	13.376	***	
e13	.401	.027	14.742	***	
e14	.432	.030	14.467	***	
e15	.406	.028	14.453	***	
e16	.468	.032	14.420	***	
e17	.435	.030	14.479	***	
e18	.405	.028	14.428	***	
e19	.266	.019	13.726	***	
e20	.695	.046	14.995	***	
e21	.297	.021	13.887	***	
e22	.314	.023	13.600	***	
e23	.406	.029	14.021	***	
e24	.269	.021	12.993	***	
e25	.403	.029	14.025	***	
e26	.468	.032	14.754	***	

	Estimate	S.E.	C.R.	P	Label
e27	.355	.025	14.349	***	
e28	.264	.019	13.650	***	
e29	.249	.018	13.524	***	
e30	.257	.019	13.437	***	
e31	.175	.015	11.930	***	
res1	.415	.027	15.149	***	

Squared Multiple Correlations: (Group number 1 - Default model)

	Estimate
Brand_Experience	.740
Expectation	.857
Satisfaction	.781
RB8	.625
SB6	.849
SB5	.777
SB4	.770
SB3	.760
SB2	.685
SB1	.615
EB5	.652
EB4	.743
EB3	.652
EB2	.696
EB1	.668
BTB8	.519
BTB7	.725
BTB6	.640
BTB5	.632
BTB4	.641
BTB3	.636
BTB2	.633
BTB1	.582
BEB12	.692
BEB10	.651
BEB9	.707
BEB8	.676
BEB7	.520
BEB6	.467
BEB5	.552
BEB4	.425
BEB2	.496
BEB1	.506

Appendix B-5.2 Indirect model

Appendix B-5.2.1 Model fit summary

Computation of degrees of freedom (Default model)

Number of distinct sample moments:	465
Number of distinct parameters to be estimated:	71
Degrees of freedom (465 - 71):	394

Result (Default model)

Minimum was achieved
Chi-square = 1302.644
Degrees of freedom = 394
Probability level = .000

CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	71	1302.644	394	.000	3.306
Saturated model	465	.000	0		
Independence model	30	14042.809	435	.000	32.282

RMR, GFI

Model	RMR	GFI	AGFI	PGFI
Default model	.044	.850	.823	.720
Saturated model	.000	1.000		
Independence model	.634	.094	.032	.088

Baseline Comparisons

Model	NFI Delta1	RFI rho1	IFI Delta2	TLI rho2	CFI
Default model	.907	.898	.933	.926	.933
Saturated model	1.000		1.000		1.000
Independence model	.000	.000	.000	.000	.000

Parsimony-Adjusted Measures

Model	PRATIO	PNFI	PCFI
Default model	.906	.822	.845
Saturated model	.000	.000	.000
Independence model	1.000	.000	.000

RMSEA

Model	RMSEA	LO 90	HI 90	PCLOSE
Default model	.068	.064	.072	.000
Independence model	.249	.246	.253	.000

Appendix B-5.2.2 Parameter estimate

Regression Weights: (Group number 1 - Default model)

			Estimate	S.E.	C.R.	P	Label
Expectation	<---	Brand_Trust	.963	.052	18.546	***	
Brand_Experience	<---	Brand_Trust	.777	.051	15.227	***	
Satisfaction	<---	Expectation	.760	.068	11.229	***	
Satisfaction	<---	Brand_Experience	.314	.069	4.571	***	
BEB1	<---	Brand_Experience	1.000				
BEB2	<---	Brand_Experience	1.051	.054	19.651	***	
BEB4	<---	Brand_Experience	1.074	.076	14.127	***	
BEB5	<---	Brand_Experience	1.221	.076	16.114	***	
BEB6	<---	Brand_Experience	1.197	.080	14.871	***	
BEB7	<---	Brand_Experience	1.311	.084	15.674	***	
BEB8	<---	Brand_Experience	1.383	.078	17.791	***	
BEB9	<---	Brand_Experience	1.376	.076	18.211	***	
BEB10	<---	Brand_Experience	1.352	.077	17.542	***	
BEB12	<---	Brand_Experience	1.254	.069	18.099	***	
BTB1	<---	Brand_Trust	1.000				
BTB2	<---	Brand_Trust	1.156	.060	19.247	***	
BTB3	<---	Brand_Trust	1.121	.058	19.181	***	
BTB4	<---	Brand_Trust	1.219	.063	19.308	***	
BTB5	<---	Brand_Trust	1.148	.060	19.072	***	
BTB6	<---	Brand_Trust	1.133	.059	19.329	***	
BTB7	<---	Brand_Trust	1.113	.054	20.784	***	
BTB8	<---	Brand_Trust	1.152	.068	16.986	***	
EB1	<---	Expectation	1.000				
EB2	<---	Expectation	1.096	.050	22.005	***	
EB3	<---	Expectation	1.130	.054	21.101	***	
EB4	<---	Expectation	1.143	.049	23.225	***	
EB5	<---	Expectation	1.130	.053	21.209	***	
SB1	<---	Satisfaction	1.000				
SB2	<---	Satisfaction	1.016	.048	20.965	***	
SB3	<---	Satisfaction	1.057	.047	22.502	***	
SB4	<---	Satisfaction	1.055	.047	22.677	***	
SB5	<---	Satisfaction	1.091	.048	22.832	***	
SB6	<---	Satisfaction	1.145	.047	24.327	***	
RB8	<---	Expectation	.403	.098	4.098	***	
RB8	<---	Satisfaction	.625	.089	7.027	***	

Standardized Regression Weights: (Group number 1 - Default model)

			Estimate
Expectation	<---	Brand_Trust	.938
Brand_Experience	<---	Brand_Trust	.870
Satisfaction	<---	Expectation	.676
Satisfaction	<---	Brand_Experience	.243
BEB1	<---	Brand_Experience	.713
BEB2	<---	Brand_Experience	.706
BEB4	<---	Brand_Experience	.651
BEB5	<---	Brand_Experience	.741
BEB6	<---	Brand_Experience	.685
BEB7	<---	Brand_Experience	.721
BEB8	<---	Brand_Experience	.821
BEB9	<---	Brand_Experience	.840
BEB10	<---	Brand_Experience	.807
BEB12	<---	Brand_Experience	.832
BTB1	<---	Brand_Trust	.764
BTB2	<---	Brand_Trust	.797
BTB3	<---	Brand_Trust	.795
BTB4	<---	Brand_Trust	.799
BTB5	<---	Brand_Trust	.791
BTB6	<---	Brand_Trust	.800
BTB7	<---	Brand_Trust	.849
BTB8	<---	Brand_Trust	.718
EB1	<---	Expectation	.813
EB2	<---	Expectation	.829
EB3	<---	Expectation	.805
EB4	<---	Expectation	.859
EB5	<---	Expectation	.808
SB1	<---	Satisfaction	.784
SB2	<---	Satisfaction	.827
SB3	<---	Satisfaction	.871
SB4	<---	Satisfaction	.876
SB5	<---	Satisfaction	.881
SB6	<---	Satisfaction	.922
RB8	<---	Expectation	.294
RB8	<---	Satisfaction	.513

Correlations: (Group number 1 - Default model)

			Estimate
e1	<-->	e2	.387
e4	<-->	e5	.435
e4	<-->	e6	.370
e5	<-->	e6	.359
e6	<-->	e7	.201
e8	<-->	e9	.251

Variances: (Group number 1 - Default model)

	Estimate	S.E.	C.R.	P	Label
Brand_Trust	.561	.056	10.031	***	
res2	.071	.011	6.665	***	
res4	.109	.014	7.676	***	
res3	.160	.018	8.857	***	
e1	.433	.029	14.684	***	
e2	.498	.034	14.728	***	
e4	.703	.047	15.008	***	
e5	.546	.038	14.488	***	
e6	.723	.048	14.994	***	
e7	.711	.048	14.660	***	
e8	.416	.031	13.308	***	
e9	.355	.027	12.971	***	
e10	.439	.032	13.793	***	
e12	.312	.023	13.349	***	
e13	.399	.027	14.768	***	
e14	.430	.030	14.504	***	
e15	.410	.028	14.525	***	
e16	.471	.032	14.484	***	
e17	.442	.030	14.559	***	
e18	.404	.028	14.477	***	
e19	.270	.019	13.852	***	
e20	.700	.047	15.036	***	
e21	.303	.022	14.067	***	
e22	.324	.023	13.843	***	
e23	.410	.029	14.170	***	
e24	.274	.021	13.251	***	
e25	.401	.028	14.135	***	
e26	.468	.032	14.758	***	
e27	.356	.025	14.361	***	
e28	.264	.019	13.665	***	
e29	.251	.018	13.557	***	
e30	.257	.019	13.453	***	
e31	.174	.015	11.926	***	
res1	.426	.028	15.116	***	

Appendix C Regression analysis

Appendix C-1 Hypotheses testing for H1, H2, H3, and H4

Appendix C-1.1 Hypotheses testing for H1

Appendix C-1.1.1 Correlation matrix

	RP8	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Dependent variables															
The overall of consumers intended to continue buying this product, rather than any alternative (RP8).															
Independent variables															
RP8	1.000														
TP1	**.478**	1.000													
TP2	**.521**	.707	1.000												
TP3	**.495**	.607	.672	1.000											
TP4	**.483**	.501	.563	.768	1.000										
TP5	.389	.426	.519	.606	.681	1.000									
TP6	.377	.323	.437	.524	.554	.677	1.000								
TP7	.434	.403	.449	.578	.604	.630	.722	1.000							
TP8	.449	.421	.442	.552	.573	.564	.595	.740	1.000						
TP9	**.474**	.443	.470	.571	.506	.435	.380	.464	.454	1.000					
TP10	.376	.258	.358	.438	.448	.454	.462	.546	.445	.569	1.000				
TP11	.452	.460	.494	.525	.497	.462	.390	.485	.486	.517	.584	1.000			
TP12	.452	.477	.473	.583	.472	.437	.408	.519	.443	.536	.523	.590	1.000		
TP13	.436	.457	.451	.530	.444	.396	.445	.533	.472	.511	.464	.545	.755	1.000	
TP14	.402	.374	.422	.484	.406	.358	.556	.500	.483	.429	.407	.481	.659	.797	1.000

Note: Statistically significant (p<0.05)

Appendix C-1.1.2 Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.632[a]	.399	.382	.844

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	231.468	14	16.533	23.197	.000[a]
	Residual	348.530	489	.713		
	Total	579.998	503			

a. Predictors: (Constant), TP14, TP5, TP1, TP10, TP9, TP8, TP11, TP4, TP12, TP2, TP6, TP7, TP3, TP13

b. Dependent Variable: RP8

Appendix C-1.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**TP1**	**.106**	**.054**	**.106**	**1.977**	**.049**
	TP2	**.219**	**.060**	**.207**	**3.656**	**.000**
	TP3	-.053	.068	-.051	-.774	.439
	TP4	**.156**	**.065**	**.149**	**2.410**	**.016**
	TP5	-.070	.055	-.074	-1.284	.200
	TP6	.026	.052	.031	.503	.615
	TP7	.010	.059	.011	.162	.871
	TP8	**.102**	**.050**	**.113**	**2.036**	**.042**
	TP9	**.152**	**.051**	**.147**	**2.988**	**.003**
	TP10	.014	.049	.014	.280	.779
	TP11	.074	.056	.068	1.327	.185
	TP12	.069	.062	.067	1.108	.269
	TP13	.022	.068	.023	.325	.745
	TP14	.023	.060	.025	.383	.702

a. Dependent Variable: RP8

Appendix C-1.2 Hypotheses testing for H2

Appendix C-1.2.1 Correlation matrix

Dependent variables	EP5	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
The overall the products meet consumers' current expectation (EP5)															
Independent variables															
EP5	1.000														
TP1	**.479**	1.000													
TP2	**.512**	.707	1.000												
TP3	**.486**	.607	.672	1.000											
TP4	.442	.501	.563	.768	1.000										
TP5	.400	.426	.519	.606	.681	1.000									
TP6	.398	.323	.437	.524	.554	.677	1.000								
TP7	.430	.403	.449	.578	.604	.630	.722	1.000							
TP8	.344	.421	.442	.552	.573	.564	.595	.740	1.000						
TP9	.449	.443	.470	.571	.506	.435	.380	.464	.454	1.000					
TP10	.335	.258	.358	.438	.448	.454	.462	.546	.445	.569	1.000				
TP11	.385	.460	.494	.525	.497	.462	.390	.485	.486	.517	.584	1.000			
TP12	.449	.477	.473	.583	.472	.437	.408	.519	.443	.536	.523	.590	1.000		
TP13	**.489**	.457	.451	.530	.444	.396	.445	.533	.472	.511	.464	.545	.755	1.000	
TP14	.447	.374	.422	.484	.406	.358	.556	.500	.483	.429	.407	.481	.659	.797	1.000

Note: Statistically significant (p<0.05)

Appendix C-1.2.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.628[a]	.394	.376	.842

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	225.477	14	16.105	22.691	.000[a]
	Residual	347.077	489	.710		
	Total	572.554	503			

a. Predictors: (Constant), TP14, TP5, TP1, TP10, TP9, TP8, TP11, TP4, TP12, TP2, TP6, TP7, TP3, TP13

b. Dependent Variable: EP5

Appendix C-1.2.3 Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**TP1**	**.144**	**.053**	**.145**	**2.695**	**.007**
	TP2	**.196**	**.060**	**.186**	**3.281**	**.001**
	TP3	-.004	.068	-.004	-.064	.949
	TP4	.069	.065	.066	1.060	.290
	TP5	.021	.054	.023	.388	.698
	TP6	.046	.052	.055	.885	.377
	TP7	.109	.059	.123	1.860	.063
	TP8	-.120	.050	-.134	-2.392	.017
	TP9	**.149**	**.051**	**.145**	**2.930**	**.004**
	TP10	-.015	.049	-.016	-.311	.756
	TP11	-.020	.055	-.019	-.364	.716
	TP12	-.005	.062	-.005	-.078	.938
	TP13	**.147**	**.068**	**.151**	**2.150**	**.032**
	TP14	.080	.060	.089	1.348	.178

a. Dependent Variable: EP5

Appendix C-1.3 Hypotheses testing for H3

Appendix C-1.3.1 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.571[a]	.327	.325	.882

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189.371	1	189.371	243.364	.000[a]
	Residual	390.627	502	.778		
	Total	579.998	503			

a. Predictors: (Constant), EP5

b. Dependent Variable: RP8

Appendix C-1.3.2 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	EP5	.575	.037	.571	15.600	.000

a. Dependent Variable: RP8

Appendix C-1.4 Hypotheses testing for H4

Appendix C-1.4.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	Df1	df2	Sig. F Change	
1	.571[a]	.327	.325	.882	.327	243.364	1	502	.000	
2	.681[b]	.464	.448	.798	.138	8.949	14	488	.000	1.901

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	189.371	1	189.371	243.364	.000[a]
	Residual	390.627	502	.778		
	Total	579.998	503			
2	Regression	269.173	15	17.945	28.174	.000[b]
	Residual	310.825	488	.637		
	Total	579.998	503			

a. Predictors: (Constant), EP5

b. Predictors: (Constant), EP5, TP10, TP1, TP6, TP14, TP8, TP9, TP11, TP4, TP12, TP2, TP5, TP7, TP3, TP13

c. Dependent Variable: RP8

Appendix C-1.4.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Model 1	EP5	.575	.037	.571	15.600	.000	.571	.571	.571	1.000	1.000
Model 2	**EP5**	**.330**	**.043**	**.327**	**7.694**	**.000**	.571	.329	.255	**.606**	**1.650**
	TP1	.058	.051	.058	1.145	.253	.478	.052	.038	.423	2.362
	TP2	**.154**	**.057**	**.146**	**2.696**	**.007**	.521	.121	.089	.376	2.662
	TP3	-.052	.065	-.050	-.797	.426	.495	-.036	-.026	.280	3.575
	TP4	**.134**	**.061**	**.127**	**2.178**	**.030**	.483	.098	.072	.321	3.113
	TP5	-.077	.052	-.082	-1.493	.136	.389	-.067	-.049	.367	2.723
	TP6	.011	.049	.013	.225	.822	.377	.010	.007	.318	3.148
	TP7	-.026	.056	-.030	-.474	.636	.434	-.021	-.016	.281	3.565
	TP8	**.142**	**.048**	**.157**	**2.969**	**.003**	.449	.133	.098	.393	2.546
	TP9	**.103**	**.048**	**.100**	**2.123**	**.034**	.474	.096	.070	.500	2.001
	TP10	.019	.047	.019	.405	.686	.376	.018	.013	.475	2.106
	TP11	.080	.053	.074	1.531	.127	.452	.069	.051	.475	2.106
	TP12	.071	.059	.069	1.199	.231	.452	.054	.040	.336	2.979
	TP13	-.026	.065	-.027	-.403	.687	.436	-.018	-.013	.249	**4.015**
	TP14	-.004	.057	-.004	-.064	.949	.402	-.003	-.002	**.281**	3.555

Appendix C-1.4.3 Casewise Diagnostics[a]

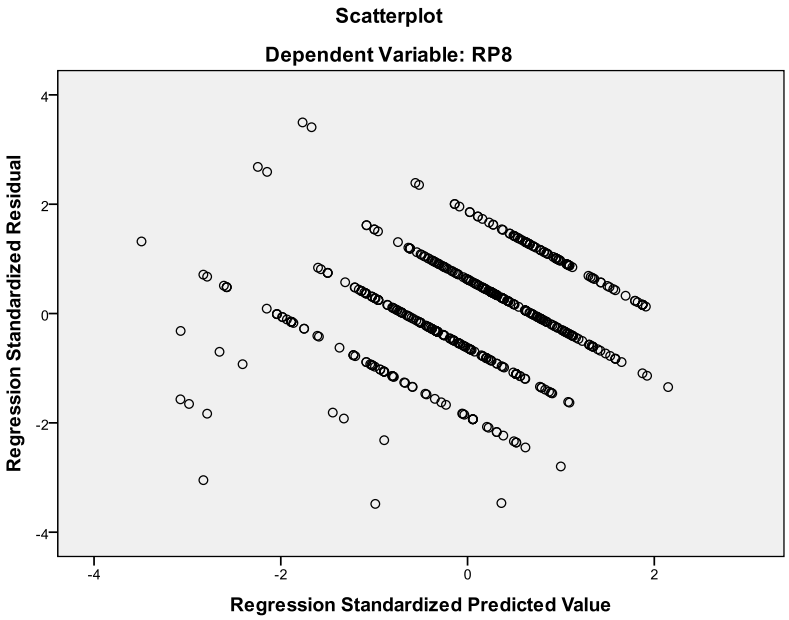
No.	Case Number	Std. Residual	RP8	Predicted Value	Residual
1	14	-2.168	4	5.73	-1.730
2	34	2.592	6	3.93	2.068
3	50	2.683	6	3.86	2.141
4	56	2.389	7	5.09	1.907
5	66	3.408	7	4.28	2.720
6	77	-2.072	4	5.65	-1.654
7	85	-2.317	3	4.85	-1.849
8	90	-2.797	4	6.23	-2.233
9	119	-2.233	4	5.78	-1.782
10	136	2.003	7	5.40	1.599
11	151	-3.467	3	5.77	-2.767
12	167	-2.450	4	5.96	-1.955
13	175	**-3.482**	2	4.78	-2.779
14	178	2.003	7	5.40	1.599
15	224	-2.168	4	5.73	-1.730
16	361	2.353	7	5.12	1.878
17	386	-2.089	4	5.67	-1.667
18	390	-3.048	1	3.43	-2.432
19	420	-2.337	4	5.86	-1.865
20	428	**3.496**	7	4.21	2.790
21	431	-2.360	4	5.88	-1.884
22	500	-2.360	4	5.88	-1.884

a. Dependent Variable: RP8

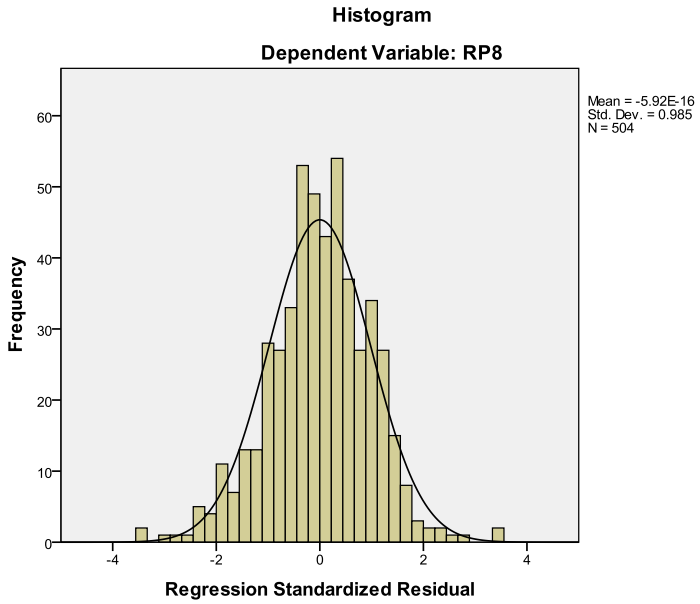
Appendix C-1.4.4 Case summaries

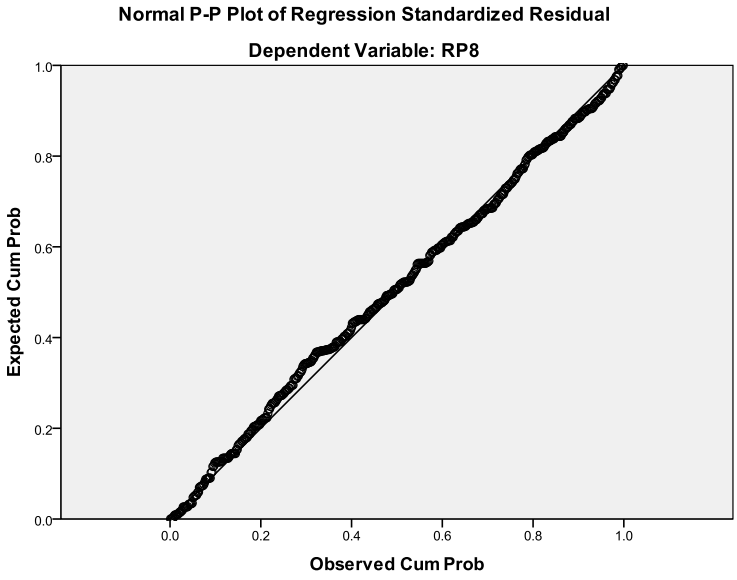
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	COVRATIO	Standardized DFFIT	Standardized DFBETA Intercept
1	14	28.99457	.01981	.05764	.93196	-.56536	.05867
2	34	8.13603	.00791	.01618	.83969	.35784	.22877
3	50	30.66190	.03224	.06096	.85560	.72319	.28223
4	56	10.54326	.00858	.02096	.87224	.37228	.08223
5	66	40.37801	.07091	.08027	.73948	1.07811	.40358
6	77	18.01531	.01096	.03582	.92713	-.42023	.03968
7	85	43.98991	.03619	.08746	.93430	-.76482	-.12249
8	90	16.04121	.01775	.03189	.81830	-.53686	.05218
9	119	13.08817	.00924	.02602	.89776	-.38607	.10041
10	136	13.81448	.00784	.02746	.92921	.35533	-.02219
11	151	14.72209	.02502	.02927	.70640	-.64028	-.01140
12	167	1.07396	.00156	.00214	.85051	-.15872	.02959
13	175	8.81778	.01539	.01753	.69892	-.50204	-.23195
14	178	13.81448	.00784	.02746	.92921	.35533	-.02219
15	224	28.99457	.01981	.05764	.93196	-.56536	.05867
16	361	24.89045	.01980	.04948	.89862	.56563	.03471
17	386	10.22083	.00636	.02032	.91248	-.32018	.03550
18	390	67.50993	.10598	.13421	.83752	-1.31542	-.20918
19	420	36.77632	.02996	.07311	.91956	-.69587	.00875
20	428	9.77950	.01710	.01944	.69738	.52927	.27879
21	431	11.33947	.00897	.02254	.87749	-.38079	.12158
22	500	11.33947	.00897	.02254	.87749	-.38079	.12158
Total		22	22	22	22	22	22
N		504	504	504	504	504	504

Appendix C-1.4.5 Linearity and homoscedasticity



Appendix C-1.4.6 Normality distribution




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: RP8
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

Appendix C-2 Hypotheses testing for H5, H6, and H7

Appendix C-2.1 Hypotheses testing for H5

Appendix C-2.1.1 Correlation matrix

	SP6	TP1	TP2	TP3	TP4	TP5	TP6	TP7	TP8	TP9	TP10	TP11	TP12	TP13	TP14
Dependent variables															
The overall consumer satisfaction with the product.															
Independent variables															
SP6	1.000														
TP1	.478	1.000													
TP2	.493	.707	1.000												
TP3	**.521**	.607	.672	1.000											
TP4	**.509**	.501	.563	.768	1.000										
TP5	.427	.426	.519	.606	.681	1.000									
TP6	.418	.323	.437	.524	.554	.677	1.000								
TP7	**.512**	.403	.449	.578	.604	.630	.722	1.000							
TP8	.466	.421	.442	.552	.573	.564	.595	.740	1.000						
TP9	**.500**	.443	.470	.571	.506	.435	.380	.464	.454	1.000					
TP10	.424	.258	.358	.438	.448	.454	.462	.546	.445	.569	1.000				
TP11	.462	.460	.494	.525	.497	.462	.390	.485	.486	.517	.584	1.000			
TP12	**.508**	.477	.473	.583	.472	.437	.408	.519	.443	.536	.523	.590	1.000		
TP13	.488	.457	.451	.530	.444	.396	.445	.533	.472	.511	.464	.545	.755	1.000	.
TP14	.421	.374	.422	.484	.406	.358	.556	.500	.483	.429	.407	.481	.659	.797	1.000

Note: Statistically significant ($p<0.05$)

Appendix C-2.1.2 Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.659[a]	.434	.418	.771

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	222.719	14	15.908	26.773	.000[a]
	Residual	290.565	489	.594		
	Total	513.284	503			

a. Predictors: (Constant), TP14, TP5, TP1, TP10, TP9, TP8, TP11, TP4, TP12, TP2, TP6, TP7, TP3, TP13

b. Dependent Variable: SP6

Appendix C-2.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.901	.256		3.527	.000
	TP1	**.113**	**.049**	**.120**	**2.313**	**.021**
	TP2	.107	.055	.107	1.956	.051
	TP3	-.026	.062	-.027	-.416	.678
	TP4	**.137**	**.059**	**.139**	**2.311**	**.021**
	TP5	-.051	.050	-.058	-1.031	.303
	TP6	.029	.047	.036	.604	.546
	TP7	**.117**	**.054**	**.140**	**2.181**	**.030**
	TP8	.035	.046	.041	.753	.452
	TP9	**.141**	**.046**	**.144**	**3.026**	**.003**
	TP10	.029	.045	.032	.650	.516
	TP11	.034	.051	.034	.680	.497
	TP12	**.112**	**.057**	**.116**	**1.978**	**.049**
	TP13	.077	.062	.084	1.239	.216
	TP14	-.031	.055	-.036	-.563	.574

a. Dependent Variable: SP6

Appendix C-2.2 Hypotheses testing for H6

Appendix C-2.2.1 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.663[a]	.440	.439	.804

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	255.252	1	255.252	394.575	.000[a]
	Residual	324.746	502	.647		
	Total	579.998	503			

a. Predictors: (Constant), EP5

b. Dependent Variable: RP8

Appendix C-2.2.2 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	SP6	.705	.036	.663	19.864	.000

a. Dependent Variable: RP8

Appendix C-2.3 Hypotheses testing for H7

Appendix C-2.3.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.663[a]	.440	.439	.804	.440	394.575	1	502	.000	
2	.718[b]	.515	.500	.759	.075	5.368	14	488	.000	1.861

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	255.252	1	255.252	394.575	.000[a]
	Residual	324.746	502	.647		
	Total	579.998	503			
2	Regression	298.591	15	19.906	34.520	.000[b]
	Residual	281.407	488	.577		
	Total	579.998	503			

a. Predictors: (Constant), SP6

b. Predictors: (Constant), SP6, TP6, TP1, TP10, TP14, TP9, TP8, TP11, TP4, TP2, TP12, TP5, TP7, TP3, TP13

c. Dependent Variable: RP8

Appendix C-2.3.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				95.0% Confidence Interval for B		Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance	VIF
1	SP6	.705	.036	.663	19.864	.000	.635	.775	.663	.663	.663	1.000	1.000
2	**SP6**	**.481**	**.045**	**.452**	**10.789**	**.000**	.393	.568	.663	.439	.340	**.566**	**1.767**
	TP1	.052	.048	.051	1.064	.288	-.044	.147	.478	.048	.034	.425	2.353
	TP2	**.167**	**.054**	**.158**	**3.098**	**.002**	.061	.273	.521	.139	.098	.381	2.625
	TP3	-.040	.062	-.039	-.658	.511	-.161	.080	.495	-.030	-.021	.280	3.577
	TP4	.091	.059	.086	1.543	.123	-.025	.206	.483	.070	.049	.319	3.140
	TP5	-.045	.049	-.048	-.923	.356	-.142	.051	.389	-.042	-.029	.367	2.728
	TP6	.012	.047	.015	.265	.791	-.079	.104	.377	.012	.008	.318	3.145
	TP7	-.047	.053	-.052	-.880	.380	-.151	.058	.434	-.040	-.028	.280	3.574
	TP8	.086	.045	.095	1.895	.059	-.003	.175	.449	.085	.060	.397	2.519
	TP9	.084	.046	.082	1.828	.068	-.006	.175	.474	.082	.058	.499	2.004
	TP10	.000	.044	.000	-.005	.996	-.087	.087	.376	.000	.000	.475	2.107
	TP11	.057	.050	.052	1.143	.253	-.041	.155	.452	.052	.036	.475	2.107
	TP12	.015	.056	.015	.266	.791	-.096	.125	.452	.012	.008	.333	3.003
	TP13	-.015	.062	-.015	-.243	.808	-.136	.106	.436	-.011	-.008	**.251**	**3.990**
	TP14	.038	.054	.042	.700	.484	-.068	.143	.402	.032	.022	.282	3.544

[a]Dependent Variable: RP8

Appendix C-2.3.3 Casewise Diagnostics[a]

No.	Case Number	Std. Residual	RP8	Predicted Value	Residual
1	11	-2.387	5	6.81	-1.813
2	12	-2.275	4	5.73	-1.728
3	34	2.498	6	4.10	1.897
4	52	-2.645	2	4.01	-2.008
5	54	-2.387	5	6.81	-1.813
6	55	-2.042	2	3.55	-1.551
7	56	2.656	7	4.98	2.017
8	66	2.465	7	5.13	1.872
9	82	-2.004	3	4.52	-1.522
10	85	-2.375	3	4.80	-1.804
11	90	-2.112	4	5.60	-1.604
12	119	-2.116	4	5.61	-1.607
13	126	-2.027	3	4.54	-1.539
14	151	**-4.378**	3	6.32	-3.325
15	175	-3.072	2	4.33	-2.333
16	193	2.174	7	5.35	1.651
17	221	-2.387	5	6.81	-1.813
18	222	-2.275	4	5.73	-1.728
19	244	-2.387	5	6.81	-1.813
20	245	-2.275	4	5.73	-1.728
21	251	2.174	7	5.35	1.651
22	360	2.175	6	4.35	1.652
23	361	2.692	7	4.96	2.044
24	368	2.166	7	5.35	1.645
25	390	-3.398	1	3.58	-2.580
26	420	-2.466	4	5.87	-1.873
27	428	**3.814**	7	4.10	2.897
28	431	-3.071	4	6.33	-2.332
29	443	2.157	7	5.36	1.638
30	479	-2.387	5	6.81	-1.813
31	480	-2.275	4	5.73	-1.728
32	496	-2.387	5	6.81	-1.813
33	497	-2.275	4	5.73	-1.728
34	500	-3.071	4	6.33	-2.332

a. Dependent Variable: RP8

Appendix C-2.3.4 Case summaries

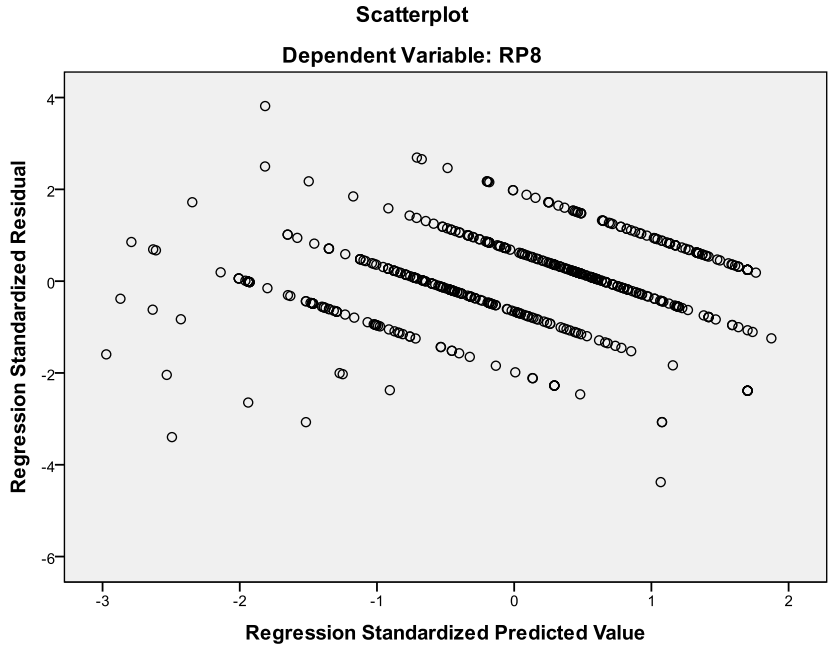
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	COVRATIO	Standardized DFFIT	Standardized DFBETA Intercept
1	11	3.70034	.00339	.00736	.86289	-.23401	.16465
2	12	24.09494	.01788	.04790	.90882	-.53725	-.02888
3	34	6.59788	.00607	.01312	.85122	.31343	.20973
4	52	5.32187	.00563	.01058	.82820	-.30212	-.28300
5	54	3.70034	.00339	.00736	.86289	-.23401	.16465
6	55	21.26791	.01264	.04228	.93645	-.45119	-.32358
7	56	10.43843	.01050	.02075	.83305	.41248	.09698
8	66	47.97887	.04540	.09539	.91663	.85733	.24896
9	82	8.12772	.00472	.01616	.91987	-.27578	-.14999
10	85	41.15240	.03520	.08181	.92049	-.75450	-.12547
11	90	18.30675	.01158	.03640	.92226	-.43199	.01252
12	119	13.31560	.00844	.02647	.91383	-.36875	.08778
13	126	8.54558	.00506	.01699	.91768	-.28551	-.18950
14	151	18.20055	.04943	.03618	.55133	-.90712	.03488
15	175	9.21865	.01248	.01833	.76675	-.45087	-.23054
16	193	11.36969	.00763	.02260	.90309	.35087	-.02500
17	221	3.70034	.00339	.00736	.86289	-.23401	.16465
18	222	24.09494	.01788	.04790	.90882	-.53725	-.02888
19	244	3.70034	.00339	.00736	.86289	-.23401	.16465
20	245	24.09494	.01788	.04790	.90882	-.53725	-.02888
21	251	11.36969	.00763	.02260	.90309	.35087	-.02500
22	360	26.76851	.01828	.05322	.92736	.54312	.11603
23	361	25.17460	.02623	.05005	.84670	.65229	.04871
24	368	16.80612	.01116	.03341	.91261	.42420	-.07391
25	390	61.29192	.11639	.12185	.76116	-1.38204	-.21642
26	420	36.18006	.03275	.07193	.89840	-.72809	.00912
27	428	9.92769	.02064	.01974	.64377	.58300	.31143
28	431	4.26140	.00629	.00847	.76170	-.32014	.18397
29	443	24.58842	.01642	.04888	.92637	.51458	-.02355
30	479	3.70034	.00339	.00736	.86289	-.23401	.16465
31	480	24.09494	.01788	.04790	.90882	-.53725	-.02888
32	496	3.70034	.00339	.00736	.86289	-.23401	.16465
33	497	24.09494	.01788	.04790	.90882	-.53725	-.02888
34	500	4.26140	.00629	.00847	.76170	-.32014	.18397
Total		34	34	34	34	34	34
N		504	504	504	504	504	504

If $CVR_i > 1+[3(k+1)/n]$, some model's parameters of the precision depends on the number of the participant (*i*th). If the researcher deletes the *i*th case, it will damage the model.

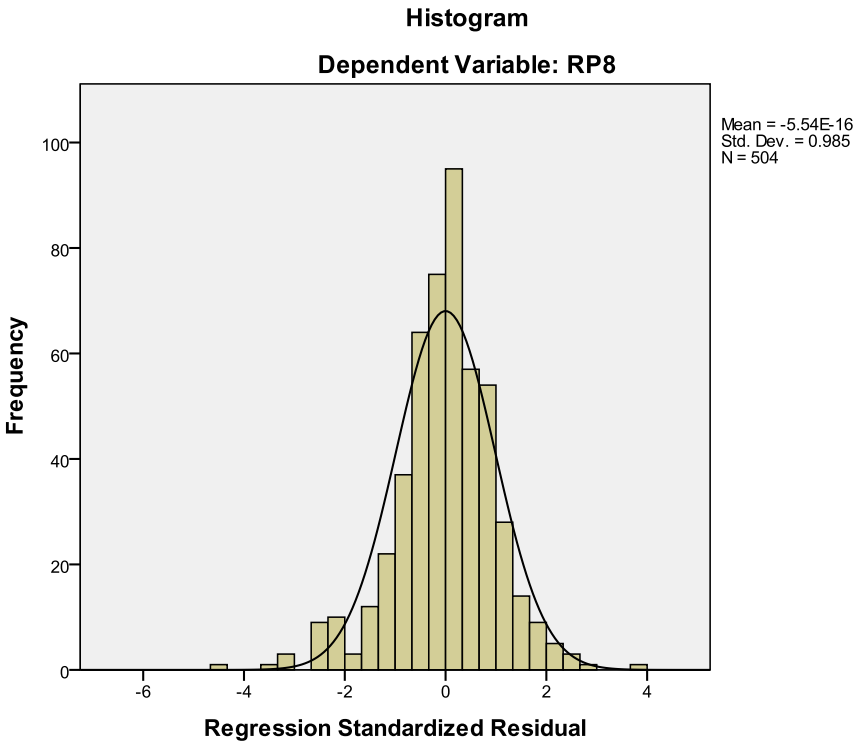
If $CVR_i < 1+[3(k+1)/n]$, some model's parameters of the precision depend on the number of the participant (*i*th). If the researcher deletes the *i*th case, it will improve the model.

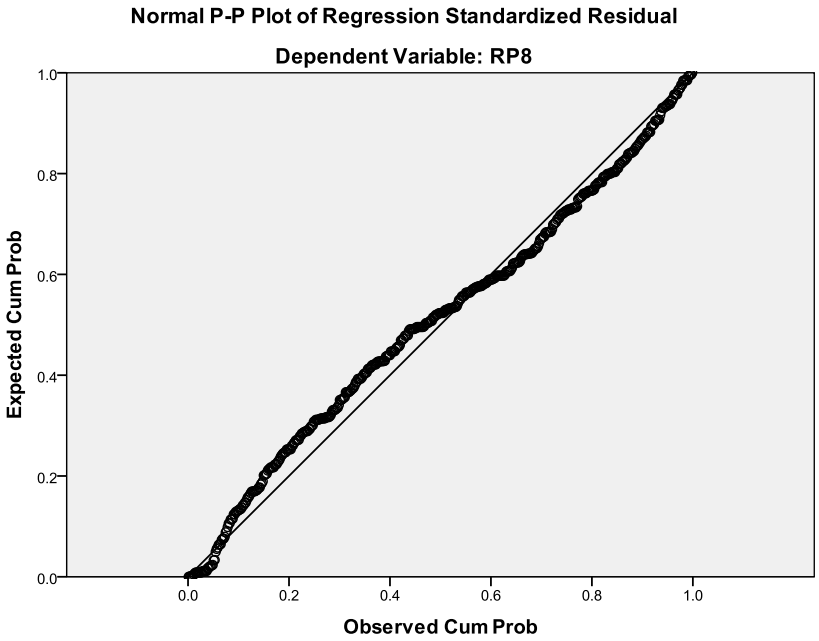
As for this statistics, CVR_i means the covariance ratio for the *i*th the participant (i=1,2,3,…..n) , *k* is the number of predictors, and n signifies the sample size (Field, 2009).

Appendix C-2.3.5 Linearity and homoscedasticity



Appendix C-2.3.6 Normality distribution





Appendix C-3 Hypotheses testing for H8, H9, H10, H11, and H12

Appendix C-3.1 Hypotheses testing for H8

Appendix C-3.1.1 Correlation matrix

	RP8	EP1	EP2	EP3	EP4
Dependent variables					
The overall of consumers intended to continue buying this product, rather than any alternative.					
Independent variables					
RP8	1.000				
EP1	**.585**	1.000			
EP2	**.556**	.744	1.000		
EP3	**.594**	.714	.668	1.000	
EP4	**.567**	.692	.744	.737	1.000

Appendix C-3.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.652[a]	.425	.420	.818

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	246.373	4	61.593	92.124	.000[a]
	Residual	333.625	499	.669		
	Total	579.998	503			

a. Predictors: (Constant), EP4, EP1, EP3, EP2

b. Dependent Variable: RP8

Appendix C-3.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.392	.218		6.376	.000
	EP1	.240	.063	.216	3.803	**.000**
	EP2	.123	.059	.121	2.091	**.037**
	EP3	.263	.057	.256	4.622	**.000**
	EP4	.140	.059	.138	2.367	**.018**

a. Dependent Variable: RP8

Appendix C-3.2 Hypotheses testing for H9

Appendix C-3.2.1 Correlation matrix

	RP8	SP1	SP2	SP3	SP4	SP5
Dependent variables						
The overall of consumers intended to continue buying this product, rather than any alternative.						
Independent variables						
RP8	1.000					
SP1	.459	1.000				
SP2	.514	.619	1.000			
SP3	.608	.611	.699	1.000		
SP4	.638	.534	.636	.765	1.000	
SP5	**.646**	.506	.559	.749	.813	1.000

Note: Statistically significant (p<0.05)

Appendix C-3.2.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.691[a]	.478	.473	.780

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	277.122	5	55.424	91.131	.000[a]
	Residual	302.876	498	.608		
	Total	579.998	503			

a. Predictors: (Constant), SP5, SP1, SP2, SP3, SP4

b. Dependent Variable: RP8

Appendix C-3.2.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.969	.219		4.425	.000
	SP1	.065	.041	.068	1.566	.118
	SP2	.088	.051	.085	1.726	.085
	SP3	**.124**	**.063**	**.119**	**1.983**	**.048**
	SP4	**.220**	**.066**	**.208**	**3.337**	**.001**
	SP5	**.331**	**.064**	**.306**	**5.156**	**.000**

a. Dependent Variable: RP8

Appendix C-3.3 Hypotheses testing for H10

Appendix C-3.3.1 Correlation matrix

	EP5	EP1	EP2	EP3	EP4
Dependent variables					
The overall the products meet consumers' current expectation.					
Independent variables					
EP5	1.000				
EP1	.606	1.000			
EP2	.612	.744	1.000		
EP3	.624	.714	.668	1.000	
EP4	**.654**	.692	.744	.737	1.000

Note: Statistically significant (p<0.05)

Appendix C-3.3.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.706[a]	.498	.494	.759

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	285.395	4	71.349	123.984	.000[a]
	Residual	287.159	499	.575		
	Total	572.554	503			

a. Predictors: (Constant), EP4, EP1, EP3, EP2

b. Dependent Variable: EP5

Appendix C-3.3.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.847	.203		4.183	.000
	EP1	**.163**	**.059**	**.148**	**2.788**	**.006**
	EP2	**.150**	**.054**	**.149**	**2.747**	**.006**
	EP3	**.209**	**.053**	**.205**	**3.964**	**.000**
	EP4	**.292**	**.055**	**.290**	**5.312**	**.000**

a. Dependent Variable: EP5

Appendix C-3.4 Hypotheses testing for H11

Appendix C-3.4.1 Correlation matrix

	SP6	SP1	SP2	SP3	SP4	SP5
Dependent variables						
The overall consumer satisfaction with the product.						
Independent variables						
SP6	1.000					
SP1	.541	1.000				
SP2	.614	.619	1.000			
SP3	.780	.611	.699	1.000		
SP4	.783	.534	.636	.765	1.000	
SP5	.824	.506	.559	.749	.813	1.000

Note: Statistically significant (p<0.05)

Appendix C-3.4.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.868[a]	.753	.750	.505

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	386.298	5	77.260	302.988	.000[a]
	Residual	126.986	498	.255		
	Total	513.284	503			

a. Predictors: (Constant), SP5, SP1, SP2, SP3, SP4

b. Dependent Variable: SP6

Appendix C-3.4.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.268	.142		1.891	.059
	SP1	.030	.027	.033	1.114	.266
	SP2	.057	.033	.058	1.719	.086
	SP3	**.249**	**.041**	**.255**	**6.151**	**.000**
	SP4	**.171**	**.043**	**.172**	**4.015**	**.000**
	SP5	**.452**	**.042**	**.443**	**10.864**	**.000**

a. Dependent Variable: SP6

Appendix C-3.5 Hypotheses testing for H12

Appendix C-3.5.1 Correlation matrix

	RP8	RP1	RP2	RP3	RP4	RP5	RP6	RP7
Dependent variables								
The overall of consumers intended to continue buying this product, rather than any alternative.								
Independent variables								
RP8	1.000							
RP1	.635	1.000						
RP2	.596	.716	1.000					
RP3	.597	.700	.731	1.000				
RP4	.603	.522	.518	.543	1.000			
RP5	.656	.638	.651	.632	.604	1.000		
RP6	.499	.455	.514	.482	.466	.508	1.000	
RP7	**.669**	.557	.573	.593	.496	.599	.480	1.000

Appendix C-3.5.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.784[a]	.615	.609	.671

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	356.599	7	50.943	113.105	.000[a]
	Residual	223.399	496	.450		
	Total	579.998	503			

a. Predictors: (Constant), RP7, RP6, RP4, RP1, RP5, RP3, RP2

b. Dependent Variable: RP8

Appendix C-3.5.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.026	.206		.126	.900
	RP1	**.233**	**.053**	**.196**	**4.403**	**.000**
	RP2	.024	.050	.022	.475	.635
	RP3	.017	.048	.016	.346	.730
	RP4	**.190**	**.037**	**.193**	**5.206**	**.000**
	RP5	**.183**	**.046**	**.172**	**3.952**	**.000**
	RP6	.059	.031	.066	1.908	.057
	RP7	**.287**	**.036**	**.306**	**7.993**	**.000**

a. Dependent Variable: RP8

Appendix C-4 Hypotheses testing for H13, H14, H15, and H16

Appendix C-4.1 Hypotheses testing for H13

Appendix C-4.1.1 Correlation matrix

	RB8	BTB1	BTB2	BTB3	BTB4	BTB5	BTB6	BTB7	BTB8
Dependent variables									
The overall you are intended to continue buying this brand, rather than any alternative.									
Independent variables									
RB8	1.000								
BTB1	.551	1.000							
BTB2	**.591**	.697	1.000						
BTB3	**.588**	.634	.653	1.000					
BTB4	**.596**	.636	.609	.678	1.000				
BTB5	**.567**	.549	.618	.611	.681	1.000			
BTB6	.550	.552	.593	.639	.618	.672	1.000		
BTB7	**.616**	.643	.668	.664	.669	.678	.721	1.000	
BTB8	.562	.459	.476	.584	.565	.622	.632	.630	1.000

Note: Statistically significant (p<0.05)

Appendix C-4.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.711[a]	.506	.498	.746

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	282.400	8	35.300	63.424	.000[a]
	Residual	275.503	495	.557		
	Total	557.903	503			

a. Predictors: (Constant), BTB8, BTB1, BTB5, BTB3, BTB6, BTB2, BTB4, BTB7

b. Dependent Variable: RB8

Appendix C-4.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	BTB1	.077	.053	.072	1.460	.145
	BTB2	**.170**	**.049**	**.176**	**3.464**	**.001**
	BTB3	.096	.051	.096	1.894	.059
	BTB4	**.131**	**.047**	**.142**	**2.776**	**.006**
	BTB5	.046	.050	.048	.936	.350
	BTB6	.006	.051	.006	.113	.910
	BTB7	**.148**	**.060**	**.138**	**2.472**	**.014**
	BTB8	**.165**	**.040**	**.189**	**4.156**	**.000**

a. Dependent Variable: RB8

Appendix C-4.2 Hypotheses testing for H14

Appendix C-4.2.1 Correlation matrix

	EB5	BTB1	BTB2	BTB3	BTB4	BTB5	BTB6	BTB7	BTB8
Dependent variables									
The overall this brand meets your current expectation.									
Independent variables									
EB5	1.000	.631	.583	.583	.575	.595	.566	.631	.528
BTB1	**.631**	1.000	.697	.634	.636	.549	.552	.643	.459
BTB2	.583	.697	1.000	.653	.609	.618	.593	.668	.476
BTB3	**.583**	.634	.653	1.000	.678	.611	.639	.664	.584
BTB4	**.575**	.636	.609	.678	1.000	.681	.618	.669	.565
BTB5	**.595**	.549	.618	.611	.681	1.000	.672	.678	.622
BTB6	.566	.552	.593	.639	.618	.672	1.000	.721	.632
BTB7	**.631**	.643	.668	.664	.669	.678	.721	1.000	.630
BTB8	.528	.459	.476	.584	.565	.622	.632	.630	1.000

Note: Statistically significant (p<0.05)

Appendix C-4.2.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727[a]	.529	.521	.745

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	308.350	8	38.544	69.439	.000[a]
	Residual	274.761	495	.555		
	Total	583.111	503			

a. Predictors: (Constant), BTB8, BTB1, BTB5, BTB3, BTB6, BTB2, BTB4, BTB7

b. Dependent Variable: EB5

Appendix C-4.2.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	.438	.207		2.119	.035
	BTB1	**.304**	**.053**	**.277**	**5.775**	**.000**
	BTB2	.058	.049	.059	1.185	.237
	BTB3	.074	.051	.073	1.472	.142
	BTB4	.025	.047	.027	.538	.591
	BTB5	**.151**	**.050**	**.152**	**3.043**	**.002**
	BTB6	.040	.051	.039	.783	.434
	BTB7	**.169**	**.060**	**.154**	**2.835**	**.005**
	BTB8	**.088**	**.040**	**.098**	**2.205**	**.028**

a. Dependent Variable: EB5

Appendix C-4.3 Hypotheses testing for H15

Appendix C-4.3.1 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.641[a]	.411	.410	.809

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.169	1	229.169	349.957	.000a
	Residual	328.734	502	.655		
	Total	557.903	503			

a. Predictors: (Constant), EB5

b. Dependent Variable: RB8

Appendix C-4.3.2 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	EB5	.627	.034	.641	18.707	.000

a. Dependent Variable: RB8

Appendix C-4.4 Hypotheses testing for H16

Appendix C-4.4.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.641[a]	.411	.410	.809	.411	349.957	1	502	.000	
2	.739[b]	.546	.538	.716	.135	18.372	8	494	.000	1.807

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.169	1	229.169	349.957	.000[a]
	Residual	328.734	502	.655		
	Total	557.903	503			
2	Regression	304.549	9	33.839	65.980	.000[b]
	Residual	253.354	494	.513		
	Total	557.903	503			

a. Predictors: (Constant), EB5

b. Predictors: (Constant), EB5, BTB8, BTB2, BTB4, BTB6, BTB1, BTB3, BTB5, BTB7

c. Dependent Variable: RB8

Appendix C-4.4.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Model 1	EB5	.627	.034	.641	18.707	.000	.641	.641	.641	1.000	1.000
Model 2	**EB5**	**.284**	**.043**	**.290**	**6.572**	**.000**	.641	.284	.199	.471	**2.122**
	BTB1	-.009	.052	-.009	-.179	.858	.551	-.008	-.005	.389	2.574
	BTB2	**.154**	**.047**	**.159**	**3.254**	**.001**	.591	.145	.099	.385	2.594
	BTB3	.075	.049	.075	1.535	.125	.588	.069	.047	.384	2.603
	BTB4	**.124**	**.045**	**.135**	**2.732**	**.007**	.596	.122	.083	.379	2.640
	BTB5	.004	.048	.004	.076	.940	.567	.003	.002	.373	2.681
	BTB6	-.006	.049	-.006	-.114	.909	.550	-.005	-.003	.377	2.650
	BTB7	.100	.058	.093	1.724	.085	.616	.077	.052	**.316**	**3.164**
	BTB8	**.140**	**.038**	**.160**	**3.660**	**.000**	.562	.162	.111	**.479**	2.087

a. Dependent Variable: RB8

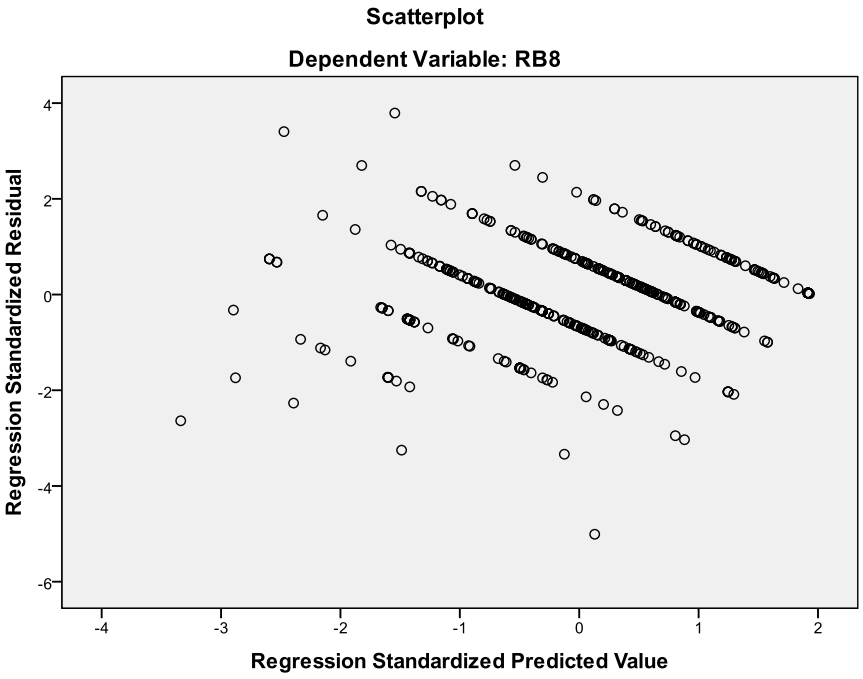
Appendix C-4.4.3 Casewise Diagnostics[a]

No.	Case Number	Std. Residual	RB8	Predicted Value	Residual
1	33	-2.033	5	6.46	-1.456
2	35	3.405	6	3.56	2.438
3	36	-2.423	4	5.74	-1.735
4	41	-2.638	1	2.89	-1.889
5	45	2.155	6	4.46	1.544
6	46	2.155	6	4.46	1.544
7	53	-3.251	2	4.33	-2.328
8	55	-2.268	2	3.62	-1.624
9	66	-3.336	3	5.39	-2.389
10	83	-2.138	4	5.53	-1.531
11	89	**-5.009**	2	5.59	-3.587
12	90	-2.950	4	6.11	-2.113
13	122	2.699	7	5.07	1.933
14	129	2.697	6	4.07	1.931
15	170	2.448	7	5.25	1.753
16	243	-2.033	5	6.46	-1.456
17	292	-3.033	4	6.17	-2.172
18	310	-2.086	5	6.49	-1.494
19	359	2.053	6	4.53	1.470
20	362	-2.297	4	5.64	-1.645
21	421	2.138	7	5.47	1.531
22	428	**3.792**	7	4.28	2.716
23	478	-2.033	5	6.46	-1.456
24	495	-2.033	5	6.46	-1.456

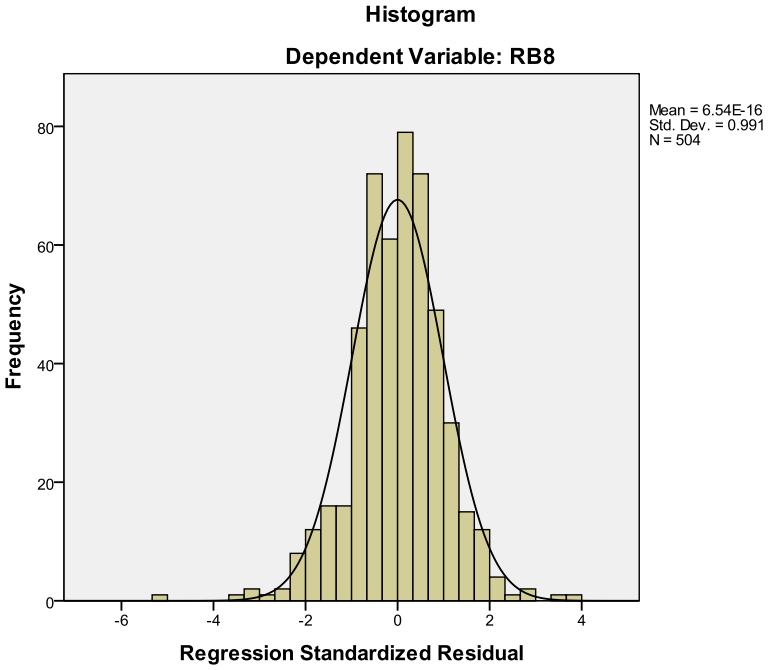
Appendix C-4.4.4 Case Summaries

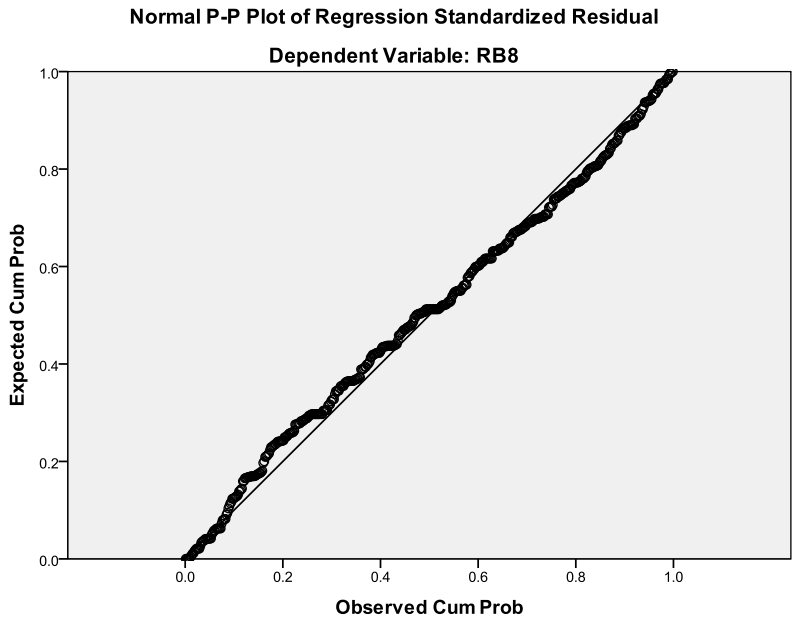
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	COVRATIO	Standardized DFFIT	Standardized DFBETA Intercept
1	33	5.94430	.00587	.01182	.95024	-.24298	.10811
2	35	24.97348	.06654	.04965	.83757	.82519	.33864
3	36	10.74854	.01437	.02137	.92447	-.38106	.05079
4	41	14.55356	.02290	.02893	.90962	-.48161	-.41372
5	45	10.81625	.01144	.02150	.94863	.33956	.15986
6	46	10.81625	.01144	.02150	.94863	.33956	.15986
7	53	10.61652	.02558	.02111	.83706	-.51085	-.16268
8	55	12.15595	.01419	.02417	.94105	-.37830	-.23580
9	66	22.08627	.05612	.04391	.84218	-.75736	.07264
10	83	2.14635	.00289	.00427	.93519	-.17072	-.03247
11	89	16.84594	.09567	.03349	.61599	-1.00390	.22185
12	90	14.74851	.02903	.02932	.87682	-.54323	-.00238
13	122	8.75427	.01469	.01740	.89432	.38579	-.00469
14	129	16.04969	.02641	.03191	.90590	.51735	.24458
15	170	.25352	.00150	.00050	.90523	.12302	.05120
16	243	5.94430	.00587	.01182	.95024	-.24298	.10811
17	292	12.67761	.02643	.02520	.86460	-.51860	.10144
18	310	5.54187	.00581	.01102	.94527	-.24181	.10675
19	359	5.42598	.00552	.01079	.94775	.23576	.09879
20	362	4.46416	.00585	.00888	.92557	-.24302	.00796
21	421	4.55521	.00516	.00906	.93927	.22800	.00227
22	428	8.75835	.02901	.01741	.76985	.54626	.36740
23	478	5.94430	.00587	.01182	.95024	-.24298	.10811
24	495	5.94430	.00587	.01182	.95024	-.24298	.10811
Total		24	24	24	24	24	24
N		504	504	504	504	504	504

Appendix C-4.4.5 Linearity and homoscedasticity



Appendix C-4.4.6 Normality distribution





Appendix C-5 Hypotheses testing for H17, H18 and H19

Appendix C-5.1 Hypotheses testing for H17

Appendix C-5.1.1 Correlation matrix

	SB6	**BTB1**	**BTB2**	**BTB3**	**BTB4**	**BTB5**	**BTB6**	**BTB7**	**BTB8**
Dependent variables									
The overall consumer satisfaction with the brand.									
Independent variables									
SB6	1.000	.694	.608	.631	.613	.615	.637	.599	.668
BTB1	.608	.631	1.000	.697	.634	.636	.549	.552	.643
BTB2	**.631**	.583	.697	1.000	.653	.609	.618	.593	.668
BTB3	**.613**	.583	.634	.653	1.000	.678	.611	.639	.664
BTB4	**.615**	.575	.636	.609	.678	1.000	.681	.618	.669
BTB5	**.637**	.595	.549	.618	.611	.681	1.000	.672	.678
BTB6	.599	.566	.552	.593	.639	.618	.672	1.000	.721
BTB7	**.668**	.631	.643	.668	.664	.669	.678	.721	1.000
BTB8	.598	.528	.459	.476	.584	.565	.622	.632	.630

Note: Statistically significant (p<0.05)

Appendix C-5.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.764[a]	.583	.576	.700

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	339.336	8	42.417	86.543	.000[a]
	Residual	242.614	495	.490		
	Total	581.950	503			

a. Predictors: (Constant), BTB8, BTB1, BTB5, BTB3, BTB6, BTB2, BTB4, BTB7

b. Dependent Variable: SB6

Appendix C-5.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.541	.194		2.788	.006
	BTB1	**.152**	**.049**	**.139**	**3.082**	**.002**
	BTB2	**.156**	**.046**	**.158**	**3.377**	**.001**
	BTB3	.066	.048	.065	1.395	.164
	BTB4	.063	.044	.066	1.410	.159
	BTB5	**.143**	**.047**	**.145**	**3.073**	**.002**
	BTB6	.020	.048	.020	.425	.671
	BTB7	**.175**	**.056**	**.160**	**3.115**	**.002**
	BTB8	**.161**	**.037**	**.180**	**4.316**	**.000**

a. Dependent Variable: SB6

Appendix C-5.2 Hypotheses testing for H18

Appendix C-5.2.1 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.749[a]	.561	.561	.698

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	313.205	1	313.205	642.543	.000[a]
	Residual	244.698	502	.487		
	Total	557.903	503			

a. Predictors: (Constant), SB6

b. Dependent Variable: RB8

Appendix C-5.2.2 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	SB6	.734	.029	.749	25.348	.000

a. Dependent Variable: RB8

Appendix C-5.3 Hypotheses testing for H19

Appendix C-5.3.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.749[a]	.561	.561	.698	.561	642.543	1	502	.000	
2	.782[b]	.611	.604	.663	.050	7.907	8	494	.000	1.869

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	313.205	1	313.205	642.543	.000[a]
	Residual	244.698	502	.487		
	Total	557.903	503			
2	Regression	340.981	9	37.887	86.280	.000[b]
	Residual	216.922	494	.439		
	Total	557.903	503			

a. Predictors: (Constant), SB6

b. Predictors: (Constant), SB6, BTB8, BTB1, BTB6, BTB4, BTB2, BTB3, BTB5, BTB7

c. Dependent Variable: RB8

Appendix C-5.3.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Model 1	SB6	.734	.029	.749	25.348	.000	.749	.749	.749	1.000	1.000
Model 2	**SB6**	**.491**	**.043**	**.502**	**11.550**	**.000**	.749	.461	.324	.417	2.399
	BTB1	.002	.047	.002	.043	.966	.551	.002	.001	.407	2.457
	BTB2	**.094**	**.044**	**.097**	**2.123**	**.034**	.591	.095	.060	.378	2.646
	BTB3	.063	.045	.064	1.406	.160	.588	.063	.039	.384	2.601
	BTB4	**.100**	**.042**	**.109**	**2.388**	**.017**	.596	.107	.067	.378	2.649
	BTB5	-.024	.044	-.025	-.536	.592	.567	-.024	-.015	.373	2.682
	BTB6	-.004	.045	-.004	-.094	.925	.550	-.004	-.003	.378	2.647
	BTB7	.062	.054	.058	1.155	.249	.616	.052	.032	**.315**	**3.174**
	BTB8	**.086**	**.036**	**.098**	**2.394**	**.017**	.562	.107	.067	**.466**	**2.145**

a. Dependent Variable: RB8

Appendix C-5.3.3 Casewise Diagnostics[a]

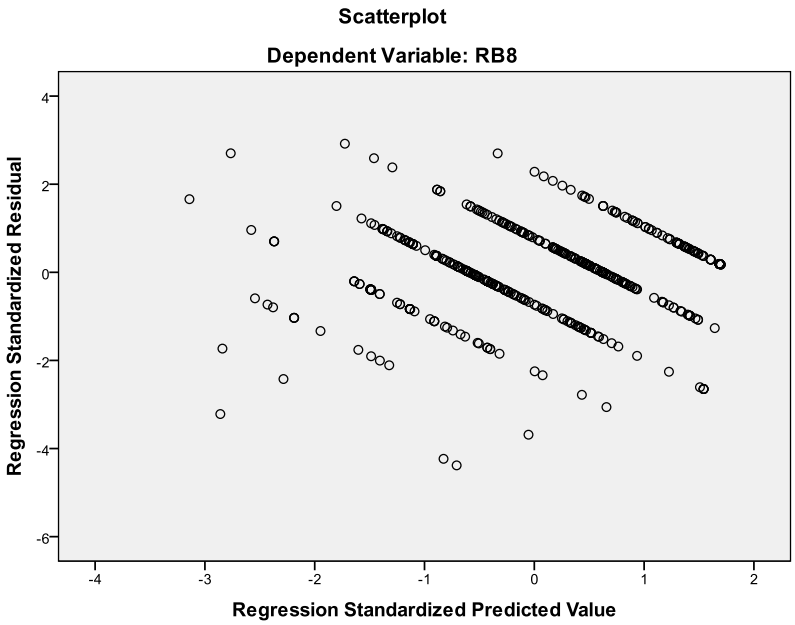
Case Number	Std. Residual	RB8	Predicted Value	Residual
33	-2.649	5	6.76	-1.756
35	2.590	6	4.28	1.716
36	-2.247	4	5.49	-1.489
41	-3.217	1	3.13	-2.132
52	-2.004	3	4.33	-1.328
53	**-4.382**	2	4.90	-2.904
55	-2.422	2	3.61	-1.605
57	-2.110	3	4.40	-1.398
58	2.702	5	3.21	1.790
66	-3.686	3	5.44	-2.442
89	-4.234	2	4.81	-2.805
90	-2.337	4	5.55	-1.548
109	2.178	7	5.56	1.443
118	2.382	6	4.42	1.578
129	**2.919**	6	4.07	1.934
170	2.075	7	5.62	1.375
209	-2.257	5	6.50	-1.496
243	-2.649	5	6.76	-1.756
292	-3.059	4	6.03	-2.027
310	-2.608	5	6.73	-1.728
362	-2.781	4	5.84	-1.843
399	2.282	7	5.49	1.512
428	2.699	7	5.21	1.789
478	-2.649	5	6.76	-1.756
495	-2.649	5	6.76	-1.756

a. Dependent Variable: RB8

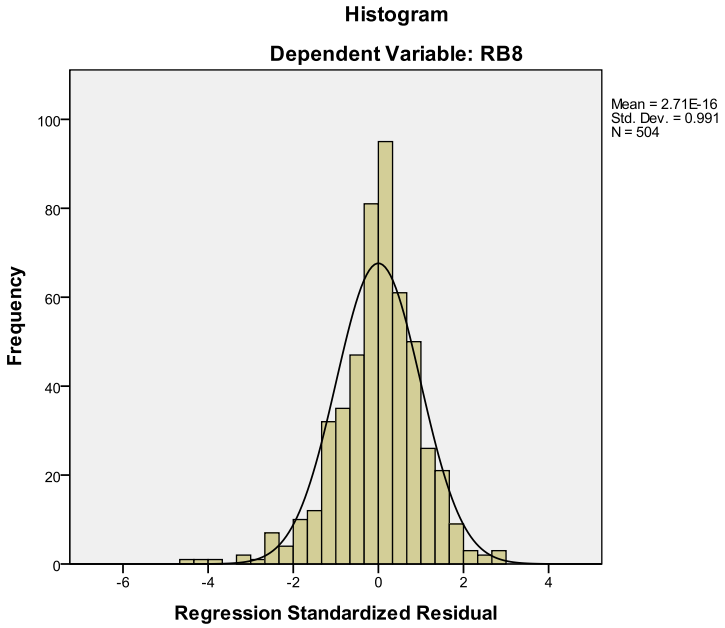
Appendix C-5.3.4 Case summaries

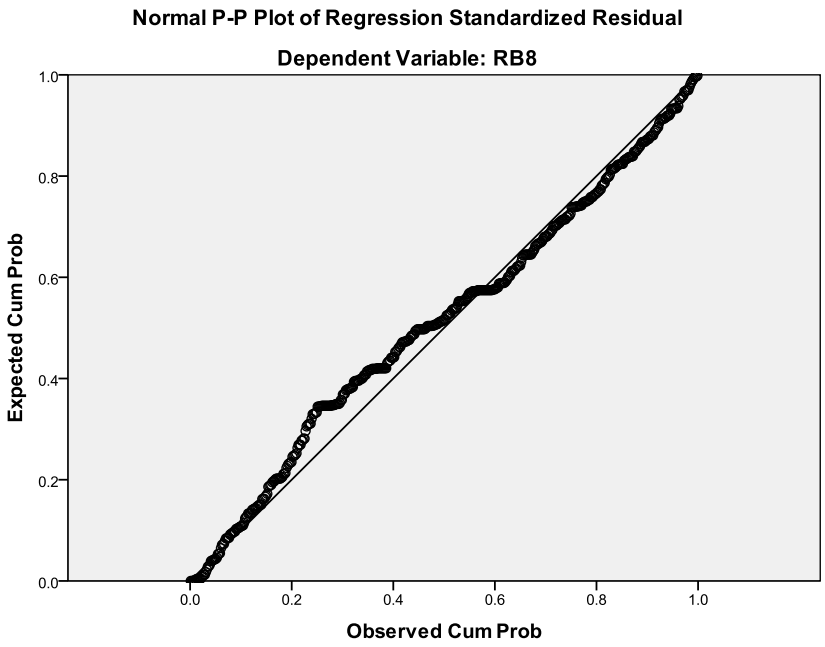
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	COVRATIO	Standardized DFFIT	Standardized DFBETA Intercept
1	33	6.05499	.01012	.01204	.89516	-.32016	.15507
2	35	9.50153	.01460	.01889	.90640	.38443	.20765
3	36	11.49551	.01319	.02285	.94181	-.36471	.03976
4	41	13.66501	.03200	.02717	.84512	-.57134	-.48805
5	52	39.07988	.03779	.07769	1.01465	-.61683	-.15630
6	53	5.83336	.02680	.01160	.69205	-.52768	-.16802
7	55	9.13993	.01232	.01817	.92189	-.35274	-.24589
8	57	7.68258	.00796	.01527	.94700	-.28306	-.13547
9	58	47.70269	.08664	.09484	.95805	.93756	.16753
10	66	17.30074	.05323	.03440	.79276	-.73945	.09095
11	89	24.85927	.10239	.04942	.72838	-1.03076	.13614
12	90	14.88428	.01838	.02959	.93948	-.43077	-.02602
13	109	13.48622	.01448	.02681	.95135	.38204	-.05541
14	118	5.41137	.00742	.01076	.91951	.27365	.12445
15	129	15.87722	.03061	.03157	.88186	.55769	.26555
16	170	1.50907	.00217	.00300	.93918	.14775	.03050
17	209	2.41786	.00351	.00481	.92560	-.18807	.08395
18	243	6.05499	.01012	.01204	.89516	-.32016	.15507
19	292	12.67890	.02689	.02521	.86173	-.52311	.09383
20	310	5.57638	.00913	.01109	.89848	-.30391	.14436
21	362	4.13873	.00806	.00823	.87907	-.28590	.02010
22	399	11.83507	.01399	.02353	.93924	.37576	-.07865
23	428	17.34199	.02861	.03448	.90771	.53849	.22168
24	478	6.05499	.01012	.01204	.89516	-.32016	.15507
25	495	6.05499	.01012	.01204	.89516	-.32016	.15507
		25	25	25	25	25	25
		504	504	504	504	504	504

Appendix C-5.3.5 Linearity and homoscedasticity



Appendix C-5.3.6 Normality distribution




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: RB8
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

Appendix C-6 Hypotheses testing for H20, H21, and H22

Appendix C-6.1 Hypotheses testing for H20

Appendix C-6.1.1 Correlation matrix

	RB8	BEB1	BEB2	BEB3	BEB4	BEB5	BEB6	BEB7	BEB8	BEB9	BEB10	BEB11	BEB12
Dependent variables													
The overall consumers intend to continue buying this brand, rather than any alternative.													
Independent variables													
RB8	1.000												
BEB1	**.533**	1.000											
BEB2	.524	.696	1.000										
BEB3	.497	.522	.587	1.000									
BEB4	.479	.492	.528	.744	1.000								
BEB5	.529	.522	.548	.712	.704	1.000							
BEB6	.427	.439	.501	.644	.670	.703	1.000						
BEB7	.454	.460	.462	.629	.610	.676	.659	1.000					
BEB8	**.612**	.546	.549	.553	.467	.574	.562	.641	1.000				
BEB9	**.599**	.611	.592	.574	.507	.616	.542	.633	.767	1.000			
BEB10	.573	.554	.556	.569	.523	.597	.567	.552	.686	.716	1.000		
BEB11	**.662**	.613	.546	.496	.470	.534	.470	.490	.641	.657	.691	1.000	
BEB12	**.618**	.618	.575	.537	.496	.572	.528	.559	.679	.691	.689	.773	1.000

Note: Statistically significant (p<0.05)

Appendix C-6.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.732[a]	.536	.525	.726

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	299.168	12	24.931	47.311	.000[a]
	Residual	258.735	491	.527		
	Total	557.903	503			

a. Predictors: (Constant), BEB12, BEB4, BEB2, BEB7, BEB10, BEB1, BEB6, BEB8, BEB3, BEB11, BEB5, BEB9

b. Dependent Variable: RB8

Appendix C-6.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	BEB1	.032	.054	.029	.605	.546
	BEB2	.076	.050	.072	1.516	.130
	BEB3	.020	.050	.021	.403	.687
	BEB4	**.108**	**.050**	**.113**	**2.173**	**.030**
	BEB5	**.107**	**.051**	**.112**	**2.083**	**.038**
	BEB6	-.083	.044	-.093	-1.890	.059
	BEB7	-.060	.043	-.069	-1.394	.164
	BEB8	**.202**	**.051**	**.217**	**4.001**	**.000**
	BEB9	.064	.054	.066	1.169	.243
	BEB10	.002	.049	.002	.045	.964
	BEB11	**.328**	**.055**	**.316**	**5.924**	**.000**
	BEB12	.080	.058	.077	1.381	.168

a. Dependent Variable: RB8

Appendix C-6.2 Hypotheses testing for H21

Appendix C-6.2.1 Correlation matrix

	EB5	BEB1	BEB2	BEB3	BEB4	BEB5	BEB6	BEB7	BEB8	BEB9	BEB10	BEB11	BEB12
Dependent variables													
Independent variables													
EB5	1.000												
BEB1	.494	1.000											
BEB2	.486	.696	1.000										
BEB3	.465	.522	.587	1.000									
BEB4	.450	.492	.528	.744	1.000								
BEB5	**.511**	.522	.548	.712	.704	1.000							
BEB6	.381	.439	.501	.644	.670	.703	1.000						
BEB7	.479	.460	.462	.629	.610	.676	.659	1.000					
BEB8	**.550**	.546	.549	.553	.467	.574	.562	.641	1.000				
BEB9	.526	.611	.592	.574	.507	.616	.542	.633	.767	1.000			
BEB10	.467	.554	.556	.569	.523	.597	.567	.552	.686	.716	1.000		
BEB11	**.557**	.613	.546	.496	.470	.534	.470	.490	.641	.657	.691	1.000	
BEB12	**.574**	.618	.575	.537	.496	.572	.528	.559	.679	.691	.689	.773	1.000

Appendix C-6.2.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.667[a]	.445	.431	.812

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	259.227	12	21.602	32.748	.000[a]
	Residual	323.884	491	.660		
	Total	583.111	503			

a. Predictors: (Constant), BEB12, BEB4, BEB2, BEB7, BEB10, BEB1, BEB6, BEB8, BEB3, BEB11, BEB5, BEB9

b. Dependent Variable: EB5

Appendix C-6.2.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.711	.244		2.911	.004
	BEB1	.059	.060	.052	.990	.323
	BEB2	.101	.056	.094	1.811	.071
	BEB3	.008	.056	.008	.145	.885
	BEB4	.097	.056	.100	1.747	.081
	BEB5	**.160**	**.058**	**.164**	**2.784**	**.006**
	BEB6	**-.147**	**.049**	**-.162**	**-3.002**	**.003**
	BEB7	.076	.048	.086	1.591	.112
	BEB8	**.190**	**.057**	**.199**	**3.352**	**.001**
	BEB9	-.001	.061	-.001	-.020	.984
	BEB10	-.102	.054	-.107	-1.886	.060
	BEB11	**.188**	**.062**	**.177**	**3.033**	**.003**
	BEB12	**.193**	**.065**	**.181**	**2.981**	**.003**

a. Dependent Variable: RB8

Appendix C-6.3 Hypothesis testing for H22

Appendix C-6.3.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.641[a]	.411	.410	.809	.411	349.957	1	502	.000	
2	.766[b]	.586	.575	.686	.176	17.334	12	490	.000	1.684

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.169	1	229.169	349.957	.000a
	Residual	328.734	502	.655		
	Total	557.903	503			
2	Regression	327.132	13	25.164	53.431	.000b
	Residual	230.771	490	.471		
	Total	557.903	503			

a. Predictors: (Constant), EB5

b. Predictors: (Constant), EB5, BEB6, BEB1, BEB10, BEB7, BEB4, BEB2, BEB11, BEB8, BEB3, BEB5, BEB12, BEB9

c. Dependent Variable: RB8

Appendix C-6.3.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Model 1	EB5	.627	.034	.641	18.707	.000	.641	.641	.641	1.000	1.000
Model 2	(Constant)	.473	.208		2.276	.023					
	EB5	**.294**	**.038**	**.300**	**7.706**	**.000**	.641	.329	.224	**.555**	**1.800**
	BEB1	.015	.051	.013	.295	.768	.533	.013	.009	.411	2.430
	BEB2	.046	.047	.044	.971	.332	.524	.044	.028	.417	2.396
	BEB3	.018	.048	.019	.376	.707	.497	.017	.011	.335	2.988
	BEB4	.079	.047	.083	1.686	.093	.479	.076	.049	.345	2.896
	BEB5	.060	.049	.063	1.225	.221	.529	.055	.036	.320	3.123
	BEB6	-.040	.042	-.045	-.946	.344	.427	-.043	-.027	.381	2.627
	BEB7	-.082	.041	-.095	-2.023	.044	.454	-.091	-.059	.384	2.602
	BEB8	**.147**	**.048**	**.157**	**3.032**	**.003**	.612	.136	.088	.314	3.180
	BEB9	.064	.052	.067	1.244	.214	.599	.056	.036	**.293**	**3.414**
	BEB10	.032	.046	.034	.701	.484	.573	.032	.020	.351	2.850
	BEB11	**.273**	**.053**	**.263**	**5.164**	**.000**	.662	.227	.150	.326	3.063
	BEB12	.023	.055	.022	.421	.674	.618	.019	.012	.302	3.308

a. Dependent Variable: RB8

Appendix C-6.3.3 Casewise Diagnostics[a]

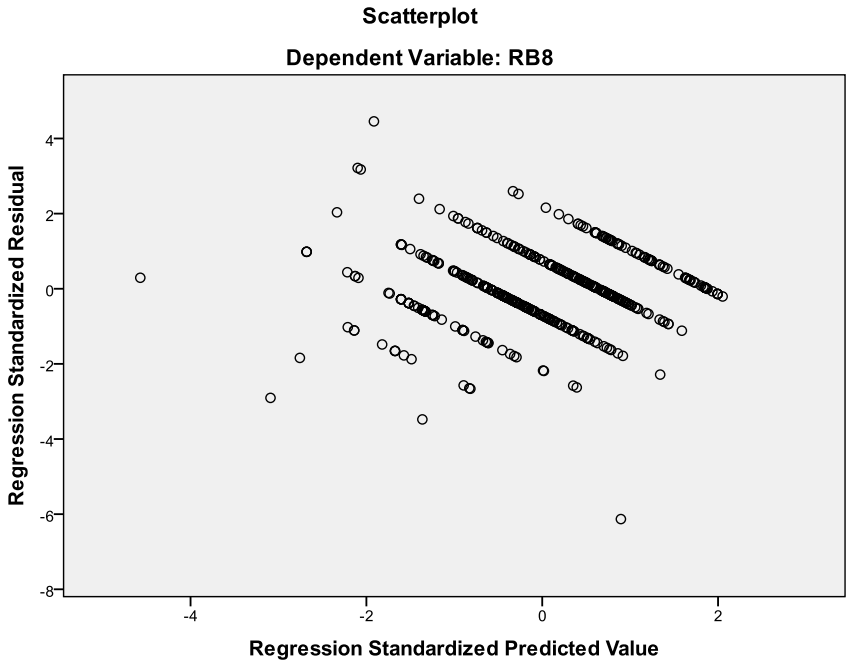
No.	Case Number	Std. Residual	RB8	Predicted Value	Residual
1	35	3.216	6	3.79	2.207
2	41	-2.905	1	2.99	-1.994
3	42	-2.662	3	4.83	-1.827
4	45	2.396	6	4.36	1.644
5	49	2.035	5	3.60	1.396
6	53	-3.478	2	4.39	-2.387
7	66	-2.648	3	4.82	-1.817
8	77	2.597	7	5.22	1.782
9	78	-2.580	4	5.77	-1.770
10	82	-2.572	3	4.77	-1.765
11	84	-2.285	5	6.57	-1.568
12	89	**-6.131**	2	6.21	-4.208
13	90	-2.177	4	5.49	-1.494
14	119	2.120	6	4.55	1.455
15	122	2.523	7	5.27	1.732
16	129	3.175	6	3.82	2.179
17	292	-2.188	4	5.50	-1.501
18	350	2.157	7	5.52	1.480
19	362	-2.627	4	5.80	-1.803
20	428	**4.455**	7	3.94	3.058

a. Dependent Variable: RB8

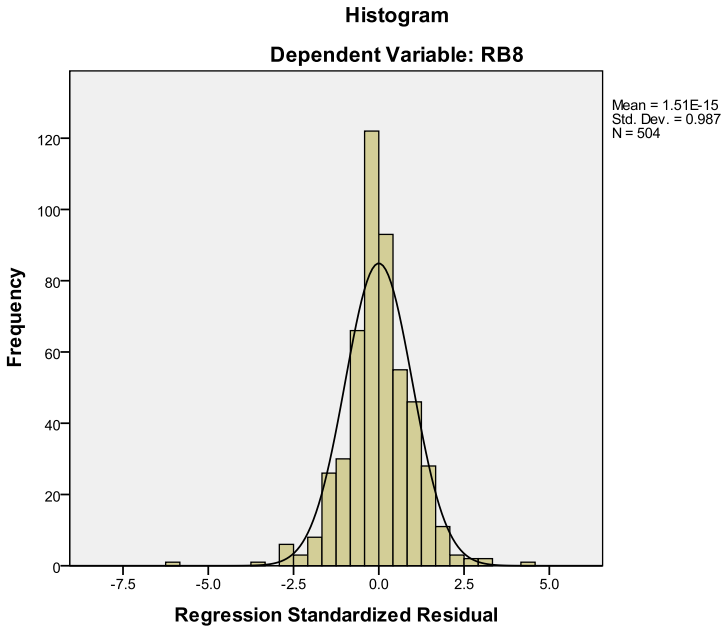
Appendix C-6.3.4 Case summaries

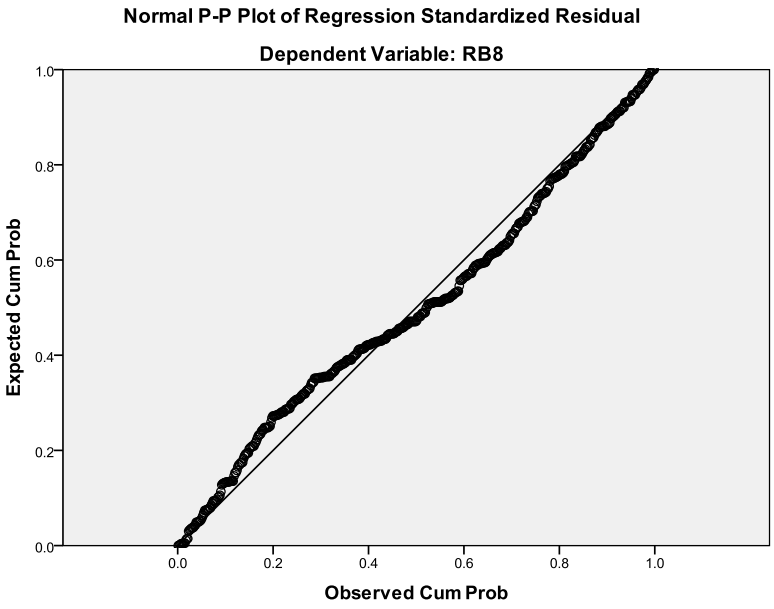
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	Standardized DFFIT	Standardized DFBETA Intercept
1	35	40.98103	.07339	.08147	1.02447	.19457
2	41	20.92372	.02872	.04160	-.63923	-.48953
3	42	1.58417	.00263	.00315	-.19295	-.09966
4	45	18.82312	.01751	.03742	.49765	.18273
5	49	9.52496	.00645	.01894	.30157	.20625
6	53	7.25622	.01465	.01443	-.45825	-.16178
7	66	8.04957	.00934	.01600	-.36396	-.08525
8	77	4.07954	.00496	.00811	.26515	-.01565
9	78	13.97498	.01503	.02778	-.46150	.12330
10	82	8.37574	.00915	.01665	-.35995	-.12049
11	84	5.76464	.00515	.01146	-.26974	.14384
12	89	15.51737	.09425	.03085	-1.19591	.28977
13	90	5.70408	.00463	.01134	-.25564	.00844
14	119	15.57243	.01131	.03096	.39937	.04648
15	122	9.85938	.01025	.01960	.38105	-.01345
16	129	22.45049	.03693	.04463	.72616	.40163
17	292	13.20675	.01022	.02626	-.37987	-.03817
18	350	28.91240	.02234	.05748	.56153	.02422
19	362	11.82164	.01323	.02350	-.43303	.09447
20	428	12.36667	.03976	.02459	.76131	.32628
Total		20	20	20	20	20
N		504	504	504	504	504

Appendix C-6.3.5 Linearity and homoscedasticity



Appendix C-6.3.6 Normality distribution




Normal P-P Plot of Regression Standardized Residual
Dependent Variable: RB8
Expected Cum Prob
Observed Cum Prob
0.0
0.2
0.4
0.6
0.8
1.0

Appendix C-7 Hypotheses testing for H23 and H24

Appendix C-7.1 Hypotheses testing for H23

Appendix C-7.1.1 Correlation matrix

	SB6	BEB1	BEB2	BEB3	BEB4	BEB5	BEB6	BEB7	BEB8	BEB9	BEB10	BEB11	BEB12
Dependent variables													
Independent variables													
SB6	1.000												
BEB1	.579	1.000											
BEB2	.563	.696	1.000										
BEB3	.532	.522	.587	1.000									
BEB4	.478	.492	.528	.744	1.000								
BEB5	**.546**	.522	.548	.712	.704	1.000							
BEB6	.446	.439	.501	.644	.670	.703	1.000						
BEB7	.462	.460	.462	.629	.610	.676	.659	1.000					
BEB8	**.599**	.546	.549	.553	.467	.574	.562	.641	1.000				
BEB9	**.582**	.611	.592	.574	.507	.616	.542	.633	.767	1.000			
BEB10	.539	.554	.556	.569	.523	.597	.567	.552	.686	.716	1.000		
BEB11	**.632**	.613	.546	.496	.470	.534	.470	.490	.641	.657	.691	1.000	
BEB12	**.657**	.618	.575	.537	.496	.572	.528	.559	.679	.691	.689	.773	1.000

Note: Statistically significant (p<0.05)

Appendix C-7.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.740[a]	.547	.536	.732

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	318.564	12	26.547	49.488	.000[a]
	Residual	263.387	491	.536		
	Total	581.950	503			

a. Predictors: (Constant), BEB12, BEB4, BEB2, BEB7, BEB10, BEB1, BEB6, BEB8, BEB3, BEB11, BEB5, BEB9

b. Dependent Variable: SB6

Appendix C-7.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**BEB1**	**.121**	**.054**	**.106**	**2.243**	**.025**
	BEB2	**.112**	**.051**	**.104**	**2.223**	**.027**
	BEB3	.096	.051	.099	1.878	.061
	BEB4	.033	.050	.034	.667	.505
	BEB5	**.129**	**.052**	**.132**	**2.488**	**.013**
	BEB6	-.057	.044	-.063	-1.286	.199
	BEB7	-.060	.043	-.068	-1.399	.162
	BEB8	**.179**	**.051**	**.188**	**3.512**	**.000**
	BEB9	.005	.055	.006	.099	.921
	BEB10	-.082	.049	-.085	-1.668	.096
	BEB11	**.197**	**.056**	**.186**	**3.533**	**.000**
	BEB12	**.257**	**.058**	**.241**	**4.397**	**.000**

a. Dependent Variable: RB8

Appendix C-7.2 Hypotheses testing for H24

Appendix C-7.2.1 Model Summary[c]

Model	R	R Square	Change Statistics							Durbin-Watson
			Adjusted R Square	Std. Error of the Estimate	R Square Change	F Change	df1	df2	Sig. F Change	
1	.749	.561	.561	.698	.561	642.543	1	502	.000	
2	.801	.642	.633	.638	.081	9.229	12	490	.000	1.789

ANOVA[c]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	313.205	1	313.205	642.543	.000
	Residual	244.698	502	.487		
	Total	557.903	503			
2	Regression	358.316	13	27.563	67.669	.000
	Residual	199.587	490	.407		
	Total	557.903	503			

a. Predictors: (Constant), SB6

b. Predictors: (Constant), SB6, BEB6, BEB1, BEB10, BEB7, BEB4, BEB2, BEB11, BEB8, BEB3, BEB5, BEB12, BEB9

c. Dependent Variable: RB8

Appendix C-7.2.2 Coefficient[a]

Model		Unstandardized Coefficients	Standardized Coefficients				Correlations			Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part	Tolerance	VIF
Model 1	SB6	.734	.029	.749	25.348	.000	.749	.749	.749	1.000	1.000
Model 2	**SB6**	**.474**	**.039**	**.484**	**12.050**	**.000**	.533	-.024	-.014	.408	2.450
	BEB1	-.025	.047	-.022	-.530	.597	.524	.023	.014	.416	2.404
	BEB2	.023	.044	.022	.514	.608	.497	-.025	-.015	.332	3.009
	BEB3	-.025	.045	-.026	-.562	.575	.479	.095	.057	.347	2.881
	BEB4	**.092**	**.044**	**.097**	**2.107**	**.036**	.529	.046	.027	.321	3.113
	BEB5	.046	.046	.048	1.010	.313	.427	-.065	-.039	.386	2.588
	BEB6	-.056	.039	-.063	-1.448	.148	.454	-.037	-.022	.385	2.599
	BEB7	-.031	.038	-.036	-.824	.411	.612	.117	.070	.314	3.187
	BEB8	**.117**	**.045**	**.126**	**2.608**	**.009**	.599	.058	.034	**.293**	**3.414**
	BEB9	.061	.048	.064	1.276	.203	.573	.043	.026	.351	2.846
	BEB10	.041	.043	.044	.956	.340	.662	.210	.129	.324	3.083
	BEB11	**.234**	**.049**	**.226**	**4.757**	**.000**	.618	-.036	-.022	.296	3.377
	BEB12	-.042	.052	-.040	-.804	.422	.749	.478	.326	**.453**	**2.209**

a. Dependent Variable: RB8

Appendix C-7.2.3 Casewise Diagnostics[a]

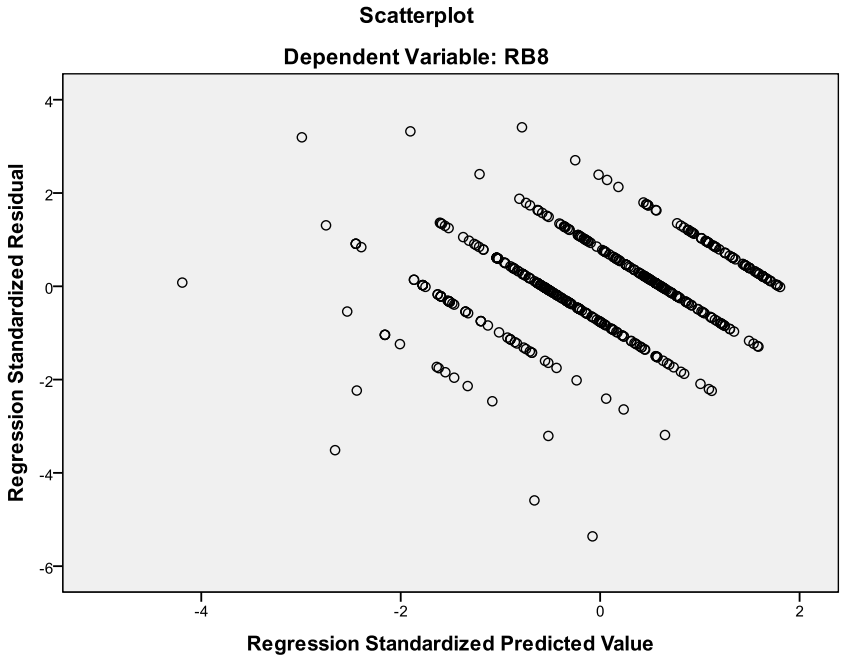
Case Number	Std. Residual	RB8	Predicted Value	Residual
35	2.405	6	4.47	1.535
41	-3.514	1	3.24	-2.242
42	-2.465	3	4.57	-1.573
52	-2.139	3	4.36	-1.365
53	-4.590	2	4.93	-2.930
55	-2.235	2	3.43	-1.426
58	3.194	5	2.96	2.039
60	-2.016	4	5.29	-1.287
66	-3.208	3	5.05	-2.048
77	2.280	7	5.54	1.455
78	-2.640	4	5.69	-1.685
84	-2.092	5	6.34	-1.335
89	**-5.361**	2	5.42	-3.422
109	2.393	7	5.47	1.527
129	3.322	6	3.88	2.120
209	-2.242	5	6.43	-1.431
292	-2.408	4	5.54	-1.537
310	-2.204	5	6.41	-1.407
362	-3.188	4	6.03	-2.035
399	2.703	7	5.27	1.725
424	2.130	7	5.64	1.359
428	**3.409**	7	4.82	2.176

a. Dependent Variable: RB8

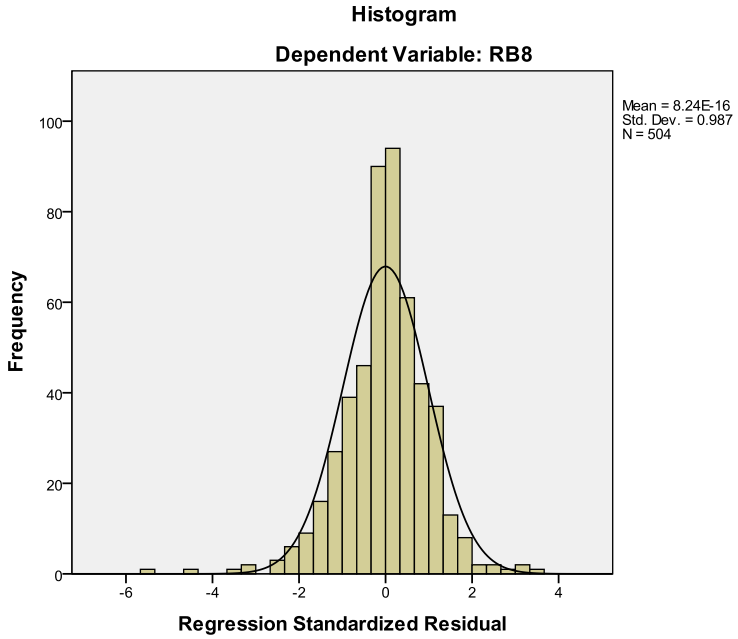
Appendix C-7.2.4 Case summaries

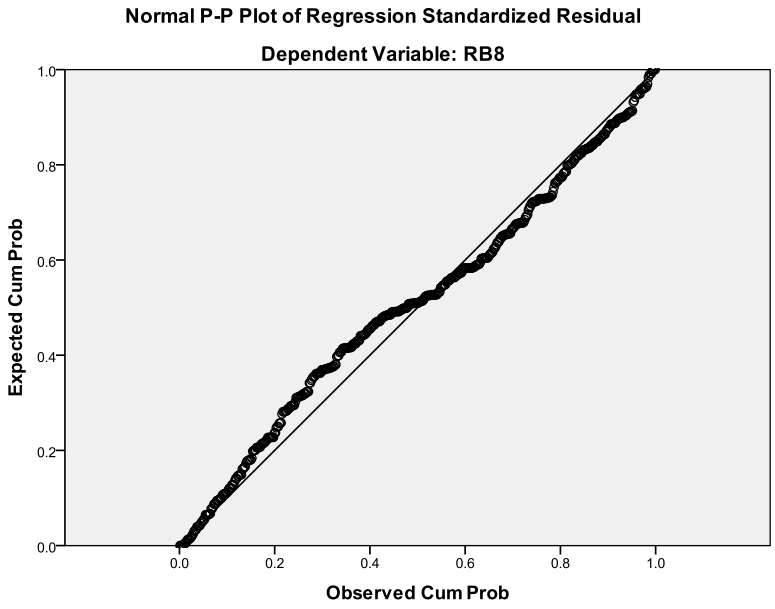
No.	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value	COVRATIO	Standardized DFFIT	Standardized DFBETA Intercept
1	35	26.26755	.02503	.05222	.91261	.59506	.08925
2	41	19.68670	.03944	.03914	.73920	-.75227	-.57270
3	42	2.62163	.00317	.00521	.86924	-.21173	-.09066
4	52	51.37594	.04238	.10214	.99195	-.77356	-.22641
5	53	3.15453	.01263	.00627	.55781	-.42955	-.15573
6	55	27.30008	.02253	.05427	.93660	-.56412	-.32531
7	58	31.49455	.05380	.06261	.80269	.87684	.31750
8	60	16.58154	.01090	.03297	.94486	-.39189	.05118
9	66	7.05286	.01215	.01402	.77309	-.41654	-.08497
10	77	4.67322	.00428	.00929	.89484	.24594	-.02334
11	78	11.04870	.01252	.02197	.85835	-.42131	.14914
12	84	6.53129	.00482	.01298	.91957	-.26077	.13055
13	89	24.01098	.11303	.04774	.44380	-1.29736	.23603
14	109	8.71049	.00821	.01732	.88715	.34068	-.05007
15	129	22.47995	.04048	.04469	.77237	.76110	.42622
16	209	2.75463	.00272	.00548	.89646	-.19588	.06221
17	292	12.81577	.01203	.02548	.89136	-.41250	-.05001
18	310	13.14077	.01033	.02612	.91717	-.38182	.11595
19	362	11.51740	.01900	.02290	.78092	-.52081	.13037
20	399	16.50148	.01949	.03281	.85733	.52587	-.02566
21	424	10.18704	.00754	.02025	.92115	.32609	.01229
22	428	19.45561	.03667	.03868	.75554	.72482	.22155
		22	22	22	22	22	22
		504	504	504	504	504	504

Appendix C-7.2.5 Linearity and homoscedasticity



Appendix C-7.2.6 Normality distribution





Appendix C-8 Hypotheses testing for H25, H26, H27, H28, and H29

Appendix C-8.1 Hypotheses testing for H25

Appendix C-8.1.1 Correlation matrix

	RB8	EB1	EB2	EB3	EB4
Dependent variables					
The overall of consumers intended to continue buying this brand, rather than any alternative.					
Independent variables					
RB8	1.000				
EB1	.547	1.000			
EB2	.570	.705	1.000		
EB3	.628	.654	.657	1.000	
EB4	**.641**	.690	.737	.713	1.000

Note: Statistically significant (p<0.05)

Appendix C-8.1.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.692[a]	.479	.474	.764

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	266.959	4	66.740	114.466	.000[a]
	Residual	290.944	499	.583		
	Total	557.903	503			

a. Predictors: (Constant), EB4, EB1, EB3, EB2

b. Dependent Variable: RB8

Appendix C-8.1.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	EB1	.078	.056	.070	1.395	.164
	EB2	.103	.055	.099	1.871	.062
	EB3	**.291**	**.048**	**.299**	**6.049**	**.000**
	EB4	**.315**	**.057**	**.306**	**5.557**	**.000**

a. Dependent Variable: RBP8

Appendix C-8.2 Hypotheses testing for H26

Appendix C-8.2.1 Correlation matrix

	RB8	SB1	SB2	SB3	SB4	SB5
Dependent variables						
The overall of consumers intended to continue buying this brand, rather than any alternative.						
Independent variables						
RB8	1.000					
SB1	.593	1.000				
SB2	.597	.739	1.000			
SB3	.667	.682	.762	1.000		
SB4	.650	.659	.705	.785	1.000	
SB5	.669	.668	.687	.741	.806	1.000

Note: Statistically significant (p<0.05)

Appendix C-8.2.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.727[a]	.529	.524	.727

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	295.055	5	59.011	111.804	.000[a]
	Residual	262.848	498	.528		
	Total	557.903	503			

a. Predictors: (Constant), SB5, SB1, SB3, SB2, SB4
b. Dependent Variable: RB8

Appendix C-8.2.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**SB1**	**.129**	**.047**	**.136**	**2.773**	**.006**
	SB2	.031	.054	.031	.571	.568
	SB3	**.257**	**.058**	**.257**	**4.438**	**.000**
	SB4	**.121**	**.060**	**.119**	**1.997**	**.046**
	SB5	**.266**	**.055**	**.271**	**4.832**	**.000**

a. Dependent Variable: RB8

Appendix C-8.3 Hypotheses testing for H27

Appendix C-8.3.1 Correlation matrix

	EB5	EB1	EB2	EB3	EB4
Dependent variables					
the overall this brand meets consumers' current expectation					
Independent variables					
EB5	1.000				
EB1	**.674**	1.000			
EB2	.664	.705	1.000		
EB3	.649	.654	.657	1.000	
EB4	.669	.690	.737	.713	1.000

Note: Statistically significant (p<0.05)

Appendix C-8.3.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.758	.574	.571	.705

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	334.825	4	83.706	168.231	.000
	Residual	248.286	499	.498		
	Total	583.111	503			

a. Predictors: (Constant), EB4, EB1, EB3, EB2

b. Dependent Variable: EB5

Appendix C-8.3.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**EB1**	**.302**	**.052**	**.266**	**5.856**	**.000**
	EB2	**.213**	**.051**	**.201**	**4.199**	**.000**
	EB3	**.207**	**.044**	**.208**	**4.663**	**.000**
	EB4	**.199**	**.052**	**.189**	**3.799**	**.000**

a. Dependent Variable: EB5

Appendix C-8.4 Hypotheses testing for H28

Appendix C-8.4.1 Correlation matrix

	SB6	SB1	SB2	SB3	SB4	SB5
Dependent variables						
The overall consumer satisfaction with the brand.						
Independent variables						
SB6	1.000					
SB1	.717	1.000				
SB2	.742	.739	1.000			
SB3	.787	.682	.762	1.000		
SB4	**.800**	.659	.705	.785	1.000	
SB5	**.846**	.668	.687	.741	.806	1.000

Note: Statistically significant (p<0.05)

Appendix C-8.4.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.894	.799	.797	.485

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	464.998	5	93.000	396.006	.000
	Residual	116.952	498	.235		
	Total	581.950	503			

a. Predictors: (Constant), SB5, SB1, SB3, SB2, SB4

b. Dependent Variable: SB6

Appendix C-8.4.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**SB1**	**.123**	**.031**	**.126**	**3.947**	**.000**
	SB2	**.109**	**.036**	**.107**	**3.014**	**.003**
	SB3	**.184**	**.039**	**.179**	**4.751**	**.000**
	SB4	**.155**	**.040**	**.150**	**3.852**	**.000**
	SB5	**.435**	**.037**	**.434**	**11.873**	**.000**

a. Dependent Variable: SB6

Appendix C-8.5 Hypotheses testing for H29

Appendix C-8.5.1 Correlation matrix

	RB8	RB1	RB2	RB3	RB4	RB5	RB6	RB7
Dependent variables								
The overall of consumers intended to continue buying this brand, rather than any alternative.								
Independent variables								
RB8	1.000							
RB1	**.637**	1.000						
RB2	.630	.698	1.000					
RB3	.618	.683	.692	1.000				
RB4	.607	.564	.561	.574	1.000			
RB5	**.668**	.602	.650	.637	.642	1.000		
RB6	.460	.430	.493	.439	.427	.483	1.000	
RB7	**.744**	.607	.651	.617	.507	.588	.451	1.000

Note: Statistically significant (p<0.05)

Appendix C-8.5.2 Model summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.817[a]	.667	.663	.612

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	372.374	7	53.196	142.217	.000[a]
	Residual	185.528	496	.374		
	Total	557.903	503			

a. Predictors: (Constant), RB7, RB6, RB4, RB1, RB5, RB3, RB2

b. Dependent Variable: RB8

Appendix C-8.5.3 Coefficient[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	**RB1**	**.143**	**.045**	**.130**	**3.191**	**.002**
	RB2	.006	.045	.006	.132	.895
	RB3	.031	.043	.029	.714	.476
	RB4	**.147**	**.035**	**.151**	**4.180**	**.000**
	RB5	**.212**	**.043**	**.200**	**4.979**	**.000**
	RB6	.027	.027	.032	1.013	.312
	RB7	**.421**	**.036**	**.435**	**11.655**	**.000**

a. Dependent Variable: RP8